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THE WEEK'S NEWS

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DREAM SCHOOLS

ELSEWHERE in this issue we print an article on the remarkable exhibition of "New Schools" at the R.I.B.A., surely one of the most attractive, interesting and enterprising of many such ventures that the Institute has ever undertaken. Unreserved congratulation is due to those who have organised it, and have thereby rendered a signal service to the educational needs of our country as well as to the architectural profession. The following remarks are not concerned with matters of design, construction or equipment, dealt with in our article just mentioned, but are rather reflections on the future of our national school-building programme suggested by the admirable handbook, *New Schools*, issued officially by the R.I.B.A. in connection with the exhibition. It should be read by all interested in education, for it contains in its twelve chapters a wealth of valuable and up-to-date information on sites, planning, design and equipment; but it also provokes some anxiety as to the practicability of "making our dreams come true." There was a significant statement in the announcement of the exhibition, made in the *R.I.B.A. Journal* for April, to the effect that "it has been found that hardly any photographs of pre-war schools are usable in the exhibition or the handbook." This remarkable fact is due not only, as the announcement suggests, to "recent technical advances on school planning, design and construction," but also to another aspect which is liable to be overlooked, that the new *Building Regulations for School Premises*, published by the Ministry in March, 1945, prescribed minimum standards of accommodation far in advance of the most generous scale adopted in pre-war days. Some hint of this is given, however, in the R.I.B.A. handbook: "Many schools built in the inter-war years, often at considerable cost, are now virtually out of date. Indeed, it has been said that over 80 per cent. of existing schools are not up to the standards set by the 1944 Act. . . . The increased areas of accommodation required, notably in classrooms, show an overall increase of 40 per cent. over the areas recommended in *Board of Education Pamphlet* No. 107, published in 1937." There is a parallel raising of standards in areas of playing-fields and therefore of sites; in daylight illumination, leading to a preponderance of single-storey buildings; and in every detail of sanitation, equipment and amenities.

Admittedly, encouragement has been given to architects by the Ministry, in its report on *Standard Construction for Schools* (1944) and in its memoranda accompanying the *Building Regulations*, to utilise every conceivable device for reducing expenditure by means of standardised units, new materials, and other methods, and by the avoidance of extravagantly solid construction and superfluous ornament. The same line is loyally followed in the R.I.B.A. handbook and is evident in the models, photographs and plans in the exhibition. It may safely be assumed that all decent people, regardless of party politics, are anxious to provide their children in future with the ideal conditions created by all these well-intentioned efforts, if and when possible, and to shoulder an increased burden of taxation to bring them about. Nevertheless, we are being warned almost daily, by responsible politicians of all parties, that our financial resources are limited: some publicists even say that we are heading for national bankruptcy. Without presuming to argue that point, we may be certain that the total amount of money available for new school building will be strictly limited for many years ahead, that the number of schools to be built or rebuilt is

enormous, and that the cost of each of them—whatever economies of construction be adopted—will be probably at least four times what it was in 1939, owing to increases in standards besides higher costs of labour and materials. Moreover, acute shortage of sites, labour and materials will inevitably retard progress. By this time, the Ministry may have been able to compute approximately the astronomical total cost of their huge national programme from the returns trickling in from various local education authorities. Presumably the Ministry has also some idea of the amount of school building likely to be authorised per annum by the Treasury. If, as we may assume, the former figure is so enormous that the programme will have to be spread over a very long span of years, or else drastically pruned, it follows that only a fraction of the new schools will be built as now designed within a reasonable time. The more pushful authorities will probably secure priorities for a few "dream schools." Others will be left behind in the queue and will have to wait for the next bus, hoping that it will not be full up when it reaches them. The alternative, in order to produce a sufficient number of slices out of a cake of limited size, is to reduce the size of each slice so that every hungry claimant gets his fair share: in other words, to reduce these Utopian standards (which we should all like to see adopted if only our resources permitted) to something like practicable possibilities. Otherwise, there is an obvious risk that a large proportion of our children will be taught, for a generation at least, in "Black List" schools. That is the unavoidable alternative. It may have been that in 1945, when the real state of our financial position was apparently not envisaged by educational theorists and dreamers, their optimism was justified; now, at any rate, most of us are only too conscious of that position. Yet a warning was provided for them and for us all just before the war in the numerous schemes for new technical college buildings. In those comparatively fat years ample funds were available for building but they were not fully used, simply because educational theorists and officials were squabbling over standards of accommodation for each institution. A long list might be compiled of important towns where not a single brick was laid, though plans had been prepared years before the war came. Some towns completed their schemes just before the axe fell, others were caught at first-floor level; but far too many of the schemes were fumbled and delayed so that technical education is still conducted at many centres (including some of our most important cities) in squalid Victorian premises. Educational building undoubtedly provides a case where half a loaf is better than no bread, and we appeal for a return to realism and common-sense. If our conclusions are regarded by some readers as a jeremiad, we can only repeat that our desire is solely to ensure that a large number of reasonable schools are erected within a reasonable time rather than a small number of "dream schools" in certain lucky towns, always bearing in mind that the nation's total resources for educational buildings are, and must be for many years, lamentably restricted. Whether we like it or not, all the praiseworthy sentiments expressed in the R.I.B.A. handbook and in the Ministry's recent publications, all the aspirations of the theorists and the teachers and other sectional interests involved, ultimately depend on money for their realisation; and there is not much money in the till.

THE ARCHITECTS' CONFERENCE

NO more successful conference has been held than that which was concluded at Liverpool on Sunday last. It was hardly to be expected that the hospitality and effervescent quality present at Dublin last year would be exceeded, but each successive conference strikes its own note, and the particular key of this year's meeting was a reaffirmation of the principles for which the R.I.B.A. charter stands—to encourage an art "esteemed and encouraged in all enlightened nations as tending greatly to promote the domestic convenience of citizens, and the public improvement and embellishment of towns." The President's speech at the inaugural meeting, the admirable papers by Professor Stephenson and Mr. Llewellyn Smith, and the Archbishop of York's great address at the memorable dedication service in the Cathedral all served to recreate inspiration and a spirit of service which are needed to-day as never before. Sir Lancelot Keay—who lays down his presidential office and his responsibility as City Architect almost at once—has ended his period of service by placing not only Liverpool but the Royal Institute in permanent debt by the manner in which he has redirected architectural thought once more towards the things of the spirit.

ST. PAUL'S CATHEDRAL

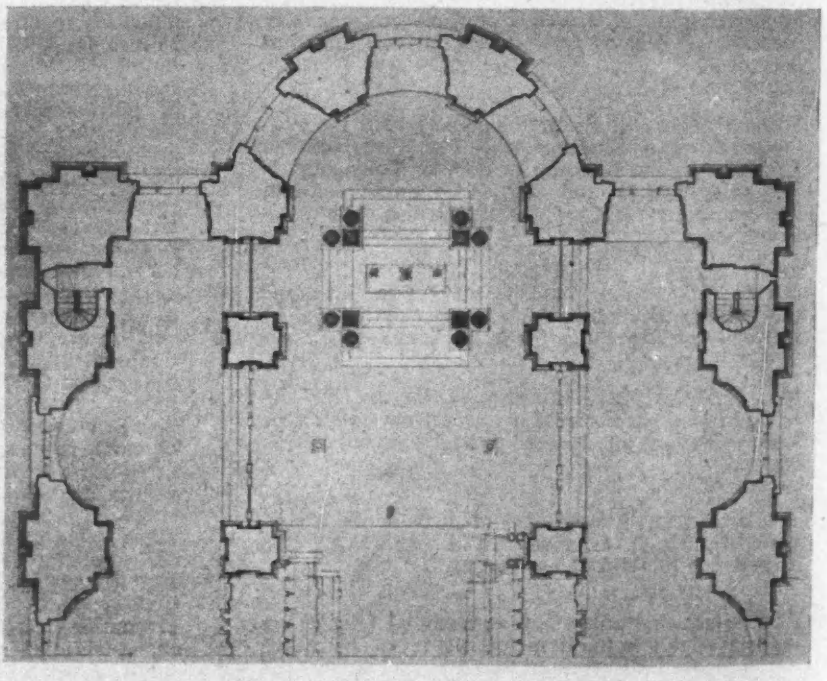
REARRANGEMENT OF THE EAST END

DETAILS regarding the internal rearrangement of the east end of St. Paul's Cathedral in harmony with Sir Christopher Wren's intentions, and providing a more spacious Sanctuary and an American Memorial Chapel in the apse, were announced on May 31 by the Dean and Chapter.

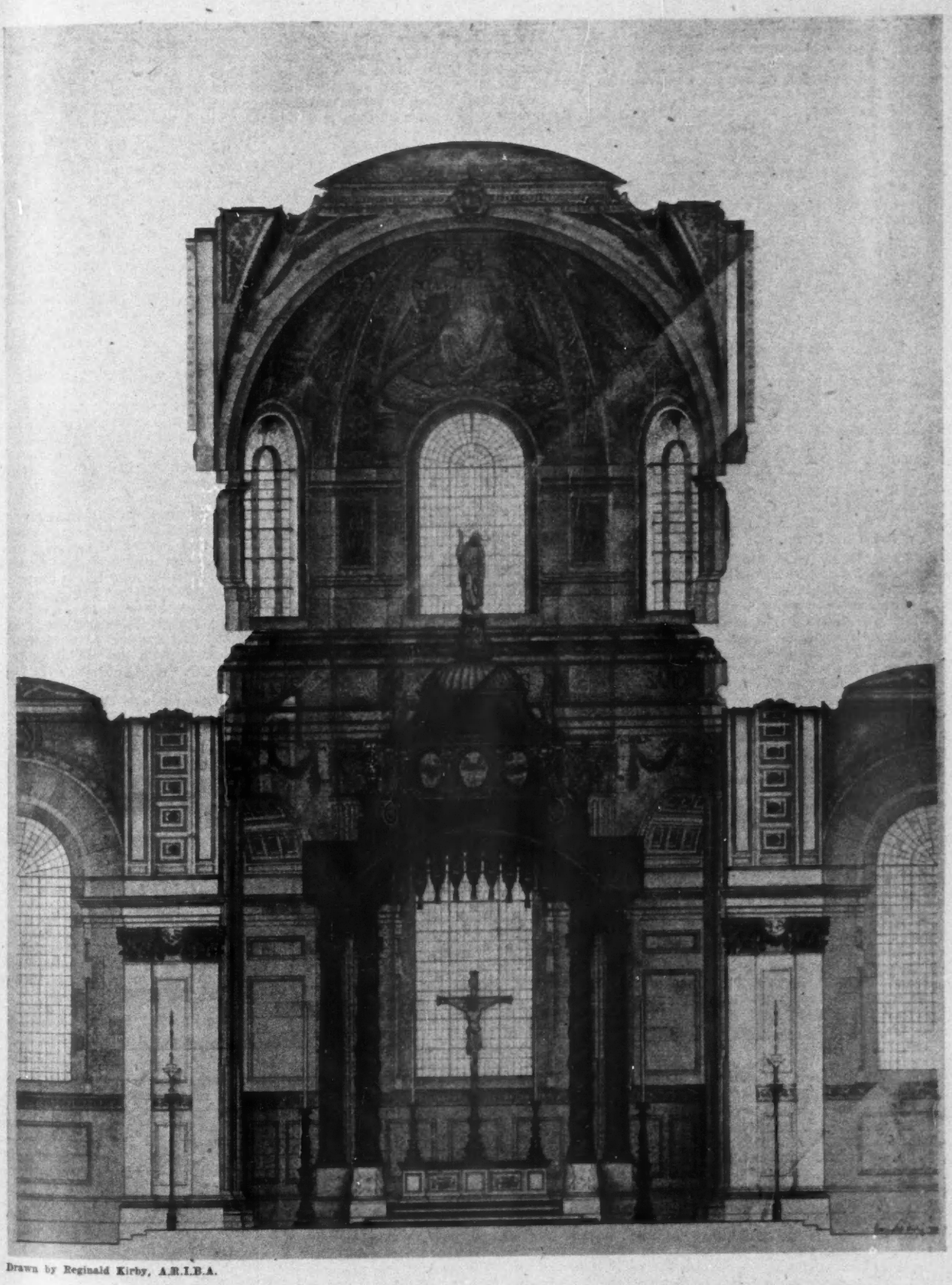
The preliminary report and design prepared at the request of the Dean and Chapter by Mr. S. E. Dykes Bower, F.R.I.B.A., and Mr. Godfrey Allen, F.R.I.B.A., Surveyor to the Fabric of St. Paul's, have been approved by the Royal Fine Art Commission, who state that they are favourably impressed by the proposals. The principal features of the architects' proposals, which have received the unanimous approval of the Dean and Chapter, are the removal of the reredos and a new high altar placed just east of the present one, surmounted by a baldachino or ciborium.

Following is the architects' report:—

It has seemed to us right that the starting point for consideration of any scheme of improvement to the east end



Proposed Plan of Eastern End, showing position of Altar and Baldachino.



Drawn by Reginald Kirby, A.R.I.B.A.

ST. PAUL'S CATHEDRAL: INTERNAL REARRANGEMENT OF THE EAST END.

On the instructions of the Dean and Chapter, Mr. S. E. Dykes Bower, F.R.I.B.A., and Mr. Godfrey Allen, F.R.I.B.A., the Surveyor to the Fabric, have prepared plans for the internal rearrangement of the East End of the Cathedral, in harmony with Sir Christopher Wren's intentions. The illustration shows the proposed Baldachino and High Altar. The architects' report and a key plan for the rearranged part of the Cathedral are given on the facing page.

should be regard for what may be believed to have been Wren's wishes and intentions. The fact that, when the crypt was in course of building, no supports for carrying an organ-screen across the west end of the choir were included, would appear to justify doubts as to whether Wren himself desired such a screen. Since he made designs for an organ to be placed on one side of the choir above the stalls, it is at least possible that his own preference was for an uninterrupted view of the altar and of the whole length of the cathedral.

But had this been realised, it is a legitimate deduction that he would have wished the altar to be endowed with a setting of some magnificence, for there would have been no climax in the small, comparatively insignificant table, raised a few steps and covered with a velvet cloth, which was placed below the central window of the apse and fenced off by an altar rail on the chord of the apse. According to "Parentalia," the altar that Wren envisaged would have stood under a grand and stately baldachino "of four pillars wreathed, of the richest Greek marbles, supporting a canopy hemispherical, with proper decorations of architecture and sculpture." One or two tentative sketches suggest that he gave some thought to its design, but never evolved a final version.

The reason why the project never matured may have been that, either with Wren's acquiescence or against his wishes, the Dean and Chapter adhered to what was then the traditional arrangement of an enclosed choir. . . . If Wren himself was disappointed, he probably resigned himself to acceptance of so simple an altar on the assumption that it would in time give place to something finer. But temporary expedients easily acquire an undeserved permanence, and 150 years passed before a changed outlook brought about substantial alterations. These alterations were part of a larger scheme, the main purpose of which was to develop the unique resources of the cathedral for congregational worship. The removal of the organ screen turned the building into a huge parish church; there was no longer the distinctive cathedral division of nave and choir; the interior, rightly or wrongly, was unobstructed from end to end.

Then it was that what Wren had foreseen as a necessity became evident. From the nave, or even the dome area, the small altar appeared ineffective; from a theological standpoint it was difficult to emphasise as the centre of worship something that could scarcely be seen; architecturally there was an obvious incongruity between its plainness and the sumptuous fittings of the choir. The present reredos was designed to rectify these defects, and to some extent it succeeded. Criticism may be made less of the work itself, which is not unworthy, than of the conception it embodies. Garner's first scheme was for a lofty reredos—very similar to the existing central portion—standing free without any attached screens. It would have had the merit of preserving, at any rate, something of the sweep of the apse and the full length of the choir. But because, as an isolated structure, the proportions of this reredos appeared unduly lofty and vertical, the architect—on the advice, it is said, of Ferguson—added the curved and colonnaded wings connecting it with the piers of the arcade. The result was an improvement in the architectural effect of the reredos itself but a mistake in other ways. Old photographs of the choir, taken after the removal of the organ screen and before the reredos had been erected, show how majestic must have been the sense of space accruing from a clear view to the extreme east end and how fine the curve of the apse. It can hardly be imagined that Wren would have favoured concealing all vision of the lower part of the apse, and shutting off its floor space by the introduction of what is really a classical equivalent of the great medieval altar screens of Winchester, St. Albans and Southwark. The present reredos does both, and thereby conflicts with the continuity and lucidity of Wren's architecture.

That may be held to be the chief objection to it. We have therefore examined the possibility of an alternative treatment of the east end which would accord with what is known of Wren's intentions and permit the formation of an American Memorial Shrine in the position already promised—the apse. Our conclusion is that the reredos should be removed and a new high altar placed just east of the present one, surmounted by a baldachino or ciborium.

We recommend that the baldachino should stand centrally under the coffered arch which separates the apse from the easternmost bay of the choir, and that it should be oblong rather than square on plan to conform with the proportions of the bay. It should incorporate the main attributes of Wren's ideal—the wreathed columns, the canopy, and the rich decoration and sculpture—with the essential elements of religious symbolism found in the existing reredos—the crucified Christ on the altar cross and the Risen Saviour, with adoring angels below, on the apex. (Our Lord in blessing is already portrayed in the mosaic roof of the apse.) The material would be oak, toned to harmonise with the stalls and organcase, and richly embellished with gilding and (in places) other colours such as ivory and scarlet. The altar ornaments would be of gold.

The altar would stand at a slightly lower level than at present, five instead of seven steps above the main sanctuary floor. These steps would be so grouped that the whole floor area in the easternmost bay of the choir would be unobstructed, giving ample room for ceremonial. The sanctuary so formed would be flanked by the magnificent wrought-iron grilles, and the great standard candlesticks would stand on its cross axis.

Furthermore, the level of the sanctuary would be reduced by one step. Whereas there are now four steps up to it from the choir aisles through the golden grilles, there would be only three. And similarly the level of the choir floor between the stalls would be lowered by the same amount. In Wren's time there were no steps up into the choir, although the stalls were fixed at much their present height. Thus the lowest range of seats stood on what was a raised plinth, which disappeared when the whole level of the choir floor was raised three steps. It would not now be practicable to lower it and return to Wren's arrangement, but even the reduction of one step would do something to restore the right relationship between stalls and choir floor.

As part of these alterations to the levels, a new floor—chiefly of black and white marble but with some richer marbles in the sanctuary—would be laid throughout the full length of the choir.

To elucidate the general working-out of the rearrangement which we suggest, a drawing of the new high altar and baldachino is submitted, together with a key plan showing their position in relation to the apse, the choir and the choir aisles. It will be seen that the baldachino has been designed in such a way as to impede as little as possible the view of the sweep of the apse.

The treatment of the stained glass in the two tiers of windows in the apse will form an integral part of the scheme and complete its colour enrichment. Since Sir William Richmond's glass in the clerestory windows of the choir was specially designed by him to harmonise with the mosaic decoration of the choir, and this mosaic work extends round the east end, it may well be that the glass in the two tiers of the apse windows should conform with it in style.

One alteration to the existing structure deserves mention. The opening up of the apse to the choir would make it desirable to secure uniformity in the materials of the main pilasters of the arcade. Stone should, therefore, be substituted for the white and green marble with which the pilasters in the apse and eastern bay respectively were refaced as part of the nineteenth century decoration of the choir.

It is not within our province to submit suggestions here for the American Memorial Chapel. Our proposals for the high altar would limit the area of the chapel to that of the apse itself; but even if the present reredos remained it could only be very slightly bigger. The more open treatment of the east end we have advocated would do away with the feeling of constriction which the high wall of the reredos induces and, by merging the apse with the choir, enhance both the beauty of the chapel and its usefulness, since on special occasions a congregation could sit in the choir without a sense of undue separation. The chapel itself would presumably be in the nature of a shrine—a palace of pilgrimage where visitors could meditate and pray. It would contain its own altar and the Roll of Honour on a detached lectern, but only a very few seats. The lower part of the apse walls below the windows would be panelled in oak, but apart from this none of the furnishings would show beyond the baldachino.

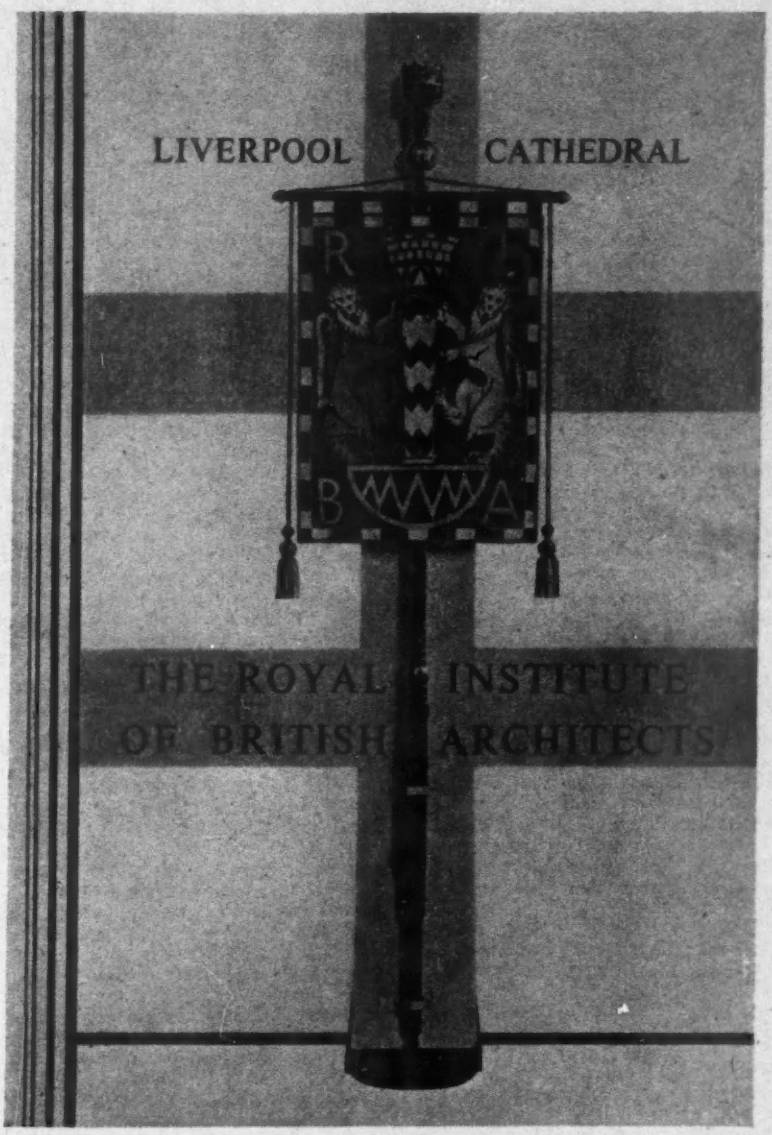
Our task is limited to defining the general disposition of the east end, and the scheme now put forward is that which, in our judgment, is most appropriate and best calculated to make the high altar and sanctuary worthy of St. Paul's.

Restoration of Parish Church.

THE PARISH CHURCH of St. Agnes', Kennington Park, which was blitzed in the early part of the war, is to be rebuilt. This church, which was built seventy years ago in the Transitional style, was regarded as one of the finest churches in South London. Fortunately, the greatest treasures of St. Agnes' are in safe keeping; the rood screen is stored in the crypt at Guildford Cathedral, the richly carved oak pulpit lies in a sheltered spot among the ruins, and several of the windows, the work of Charles Kempe, are still intact. It is expected that the work of restoration, which will be supervised by Mr. Stephen Dykes Bower, M.A., F.S.A., F.R.I.B.A., will cost £30,000, more than the cost of the original building and its fittings. In spite of the bomb damage, parish life has been successfully restored since the war, for a chapel was built in one of the transepts of the church. Now, however, this proves to be completely inadequate.

LIVERPOOL IN PERSPECTIVE

THE British Architects' Conference, which concluded in Liverpool on Sunday afternoon, will go down in architectural annals as the most impressive as well as the largest in the long series. Over 600 members and their wives attended and took full part in a splendidly devised and arranged programme rising in a crescendo to the truly magnificent Service of Dedication in Sir Giles Scott's Cathedral on Sunday morning. This alone, with its colour and ecclesiastic pageantry which yet succeeded in creating a spirit of reverent worship (hard indeed to achieve in any great Cathedral service), would have made the Conference unique. It was a sight that is not likely to be forgotten by those that witnessed it. The R.I.B.A. Banner (with whose design and making Mrs. Edward Maufe had much to do) was offered to the Dean of Liverpool by Sir Lancelot Keay in the following words: "In the name of the Royal Institute of British Architects we would that this holy place shall house our Banner and the Scroll of the Charter Royal." And the Dean: "And so it shall be. Architecture, in the words of the Royal Charter, 'being an Art esteemed and encouraged in all enlightened nations as tending greatly to promote the domestic convenience of Citizens, and the Public improvement and embellishment of towns.' So be it, to the Glory of God. Amen." The great Cathedral, with its plain wall surfaces and virtual absence of colour other than that of the red sandstone, provided a perfect setting for the Archbishop's vestments, crimson gowns of the holders of Honorary Doctorates and the emerald of the bearers' vestments as the procession with the banner made its way up the central aisle. The sermon preached by the Archbishop of York, Dr. Garbutt, with its wise message that not only great cathedrals but simple homes could be built to the glory of God, struck exactly the right note. Sir Giles Scott, who walked in the procession, may well have felt proud of his great building, and others besides ourselves will have felt a sense of personal gratitude to him.



The cover of the Order of Service, used at the offering of the Banner of the R.I.B.A. in Liverpool Cathedral on Sunday last. The Banner was executed by Messrs. Heal's, under the direction of Mrs. Edward Maufe.

To return to a chronological order, however, the Conference opened on Thursday night with an informal reception by the President R.I.B.A. with the President of the Liverpool Architectural Society (Professor Lionel Budden) in the Great Hall of St. George's Hall, whose barrel ceiling, finely coffered, has been so lately restored by Sir Lancelot Keay that the last of the scaffolding had been struck only the previous day. A splendidly arranged exhibition jointly of the work of the Liverpool Architectural Society, the Architectural and Housing Department, the City Engineer's and Surveyor's Department, the Libraries, Amusement and Arts Committee and the Liverpool School was on display and much appreciated. On Friday the Lord Mayor welcomed the delegates in the small concert hall, and Sir Lancelot Keay delivered his inaugural address, reminding the audience that it was 27 years since the first conference inaugurated by the Institute had met in the city. He added: "Since it was my privilege to address the Conference in Dublin last year many members of our profession have had reason to be anxious as to the effect upon them of the drastic cut in capital expenditure. A statement as to the action taken to relieve that anxiety has been published. To that statement I can add little, neither do I consider that this is the occasion to discuss a subject, however serious it may be for some of us, which may easily lead us into the troubled waters of political controversy, when matters of more general importance should be claiming our attention. I am glad, however, to note some signs of an increase in the volume of permitted building work and some slight indication of a fall in costs, which can only result from the expectation of greater output. The prosperity of this nation has been built up upon efficiency, hard work, and liberty of action. It will be saved by the same characteristics."

The President's subsequent reference to the great hall, designed by Elmes at the age of 23, and to the Cathedral, whose architect, Sir Giles Scott, was only 21 when his competition designs were accepted, and his belief that these buildings "provide encouragement to our more youthful members and some hope that not far ahead in time their chance may come" were well received. Mr. Gordon Stephenson's paper, though a shade too long for the occasion, was full of interest (it is reported elsewhere in this issue) and was a masterly survey.

In the afternoon a fleet of coaches transported the party *via* the Mersey Tunnel to Port Sunlight, and afterwards to Lord and Lady Leverhulme's home at Thornton Manor. Much interest was shown in the housing estate—a product of enlightened private industrial enterprise over 40 years old, built without legislation or fuss. It wears splendidly, in spite of the use of a rather hot red brick in the earlier cottages, and the central parkway, graced by Segar-Owen's charming art gallery, aroused enthusiasm. The gardens of Thornton Manor were much admired, and pessimists who had been unable to find the magic word "tea" anywhere inscribed on their cards of invitation were duly confounded.

In the evening a number of informal and cheerful dinner parties were made up in preparation for the conference dance, in which "Gus" played no small part. "Gus," as the driver of one of the fleet of radio-connected taxis which an enterprising company operates in Liverpool, was a new one on most of the party, who, by listening in to his radio talks with headquarters, were able to recapture much of the flavour of any good gangster film. The dance itself was less successful than is usual, though the entr'acte music of the police band was much enjoyed. Strategically placed by the exit, this orchestra was able both to discourse

music and keep a fatherly eye on the city's fine gilt-plate which was on display.

On the Saturday morning Mr. Llewellyn Smith read a wholly admirable paper on "Community Centres" (see page 679), in which he enlisted everyone's interest by dealing with a difficult subject in terms of people rather than as an exercise in planning, though the latter matter was not forgotten. His claim that the last place for young people's club activities should be the community centre—in view of their needs of freedom to experiment and of the exclusive company of those of their own age—was generally accepted. This is a matter which vitally affects the planning of such centres, which may be seen as providing certain essential accommodation—a hall, gymnasium, playing fields and swimming bath—for the use of organisations having their individual life and premises in the neighbourhood. On Saturday afternoon parties alternatively visited Speke, the Cathedral and city, and the docks. This last party was highly interesting and gave a new conception of the city and its architecture. The other trips were, we are told, also greatly enjoyed.

The conference dinner (reported on this page) was a very considerable success, the President and the Archbishop carrying off the principal speaking honours. On the whole, the standard of speeches was below normal, though this may have been because of the unusual number and the lateness of the hour at which they finished. But any criticism of an occasion in such an historic setting is really out of place.

And so to the Sunday and the close. The Cathedral service has already been referred to, but not the concert at Mr. Herbert Rowse's Philharmonic Hall, which was at its splendid best. Acoustically and visually perfect, the hall was a fit setting for the music of the Liverpool Philharmonic Orchestra, which turned the London visitors' thoughts homeward with Elgar's "Cockaigne" overture.

The greatest credit reflects on all who planned and carried through the conference, which went without hitch of any kind. In this are to be included the Liverpool organising committee, the staff of the R.I.B.A. (particularly the Secretary and Mr. Williams), those who prepared the exhibition and produced the handbooks and the form of service used on Sunday, and last, and perhaps foremost, to the President, whose inspiration was felt at every turn.

THE CONFERENCE DINNER

The Archbishop of York on the Work of the Institute

THE Conference Dinner was held on the Saturday evening, when the President and Lady Keay and Professor and Mrs. Lionel Budden received the guests in St. George's Hall, which provided a brilliant setting for a company which included the Lord Mayor and Lady Mayoress, the Archbishop of York, the Bishop of Liverpool, Lord and Lady Leverhulme, the Dean of Liverpool, and Sir Giles and Lady Scott.

SIR PERCY THOMAS, Past-President, R.I.B.A., in proposing the toast of "The City of Liverpool," paid tribute to the contribution Liverpool had made to architecture—not only through its buildings but also through the School of Architecture, which would ever be remembered. It had also produced the first "official" president of the Royal Institute. The general situation regarding architecture did not make him feel happy. If we were not careful, we should become so used to utility buildings and prefabricated schools that when the opportunity came we might not have the trained architects and craftsmen to design and carry out the buildings. "As I see it," said Sir Percy, "more and more great buildings will be erected by public bodies and local authorities, and a great responsibility will fall upon them to use architects and sculptors to erect fine buildings, and in this way to take the place of private patrons of another age. That opportunity must be given."

THE LORD MAYOR (Alderman W. T. Lancashire), who responded, said that great devastation had enabled them in Liverpool to determine the line of central development. There had been no such opportunity since the late eighteenth century, and Liverpool intended to take the chance with both hands. Opportunity and tenacity of purpose had helped a great slum clearance scheme to become a realisation, a work in which the President had played so great a part, especially in the building of two great satellite towns at Speke and Kirkby. The citizens of tomorrow faced exciting and thrilling things, and here the architect and builder could play their part.

"The Royal Institute of British Architects" was proposed by His Grace the LORD ARCHBISHOP OF YORK, who said he well knew that when in the presence of architects he was in the presence of optimists. He was glad to pay a tribute to a great Institute which had done so much to improve the standard of architecture in this country. Their influence was needed to-day if their profession was to maintain independence, for the country had need of voluntary, self-governing institutions. When he was a boy (continued his Grace) he had always understood licence as meaning liberty. Now, as he understood it, licence meant a policy of restriction. There appeared to be three steps in the process: We found a group of people whose time was spent in formulating new rules and regulations; a second group sent it out, and a third drew attention to the mistakes we had made in filling them up! Architects to-day were going through a difficult and anxious time, yet they were doing noble work in planning great housing estates. The day was gone, he hoped for ever, when any amateur was thought to be capable of planning houses. Every public authority and anybody who proposed to build must get the best professional advice. The architects of this country were launching out into new adventures which would give them opportunities for their creative genius.

The PRESIDENT, responding, said that a record number of delegates, nearly 600, had attended the conference, which might become known as the Great Liverpool Conference. He would be sorry if that came to be, for he would prefer it to be known as the Conference of the Great Architectural Revival. They were meeting that night in Elmes's great hall which had suffered heavily in the war. He was glad that they had been able to repair the roof and make it possible for the Conference to use the building, but much remained to be done. "I do not know," added Sir Lancelot, "if my commission to repair can be stretched to include the removal of the great organ, but I could wish it were. Some of our organs are like some of our great singers, very good to hear but not so good to look at."

One of the keynotes of the Conference had been the re-direction of attention to the terms of the R.I.B.A.'s Charter so that the whole of the people of this country, and not only a few, might have their attention drawn to the value of architecture.

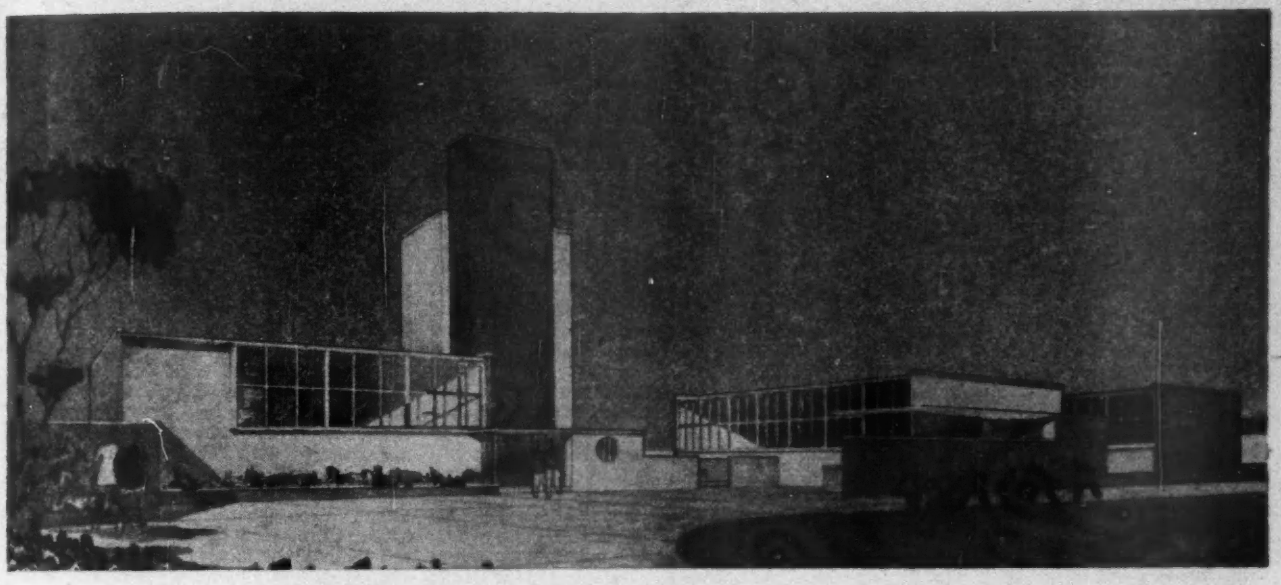
He (Sir Lancelot) had come to the end of his time in Liverpool, and would shortly retire from his post. The bombing which the city had suffered had been taken not as a signal of destruction but of the will to reconstruction, and in all his work he had been assisted by a very efficient staff which had served him loyally.

During his speech the President announced that the Hon. Associateship of the R.I.B.A. had been conferred on the Dean of Liverpool (the very Rev. Dr. F. W. Dwelly).

The toast of "The Liverpool Architectural Society" was proposed by DR. J. F. MOUNTFORD (Vice-Chancellor, University of Liverpool), who stated that the fine architecture of the city was due to the existence of a strong professional society in the city. MAJOR GILBERT W. FRASER, M.C., responded. "The Guests" were toasted by MR. JOHN L. DENMAN (Hon. Treasurer). PROFESSOR S. E. RASMUSSEN (Hon. Corresponding Member, Denmark), in responding, said that he and the other guests were most grateful to the Institute for the opportunity to join the Conference. When he received the R.I.B.A. *Journal* he put everything aside to read it. For him it caused a certain spirit to arise—an English spirit which they in Denmark had learned to appreciate during the war, a spirit which was absolutely free not only to develop art but to develop individuality to the benefit of the whole world. "The liberty which you stand for," concluded the speaker, "is essential to a better world."

Those present included:

Mr. Michael Waterhouse (President-Elect), Mr. Thomas Alker (Town Clerk, Liverpool), Professor J. S. Allen, Mr. E. Ambrose, Mr. and Mrs. C. H. Aslin, Mr. and Mrs. Leonard Barnish, Mr and Mrs. Percy J. Bartlett, Mr. and Mrs. Hubert Bennett, Mr. Eric Bird, Mr. Johnson Blackett, Mr. and Mrs. D. L. Bridgwater, Mr. and Mrs. T. J. Cahill, Mr. A. G. Clark, Mr. George V. Collie (Secretary, Conference Executive Committee), Councillor E. M. Coombes (Pres., Notts, Derby and Lincoln A.S.) and Mrs. Coombes, Mr. and Mrs. F. Hamer Crossley, Mr. Arthur J. Davis, R.A., Mr. and Mrs. H. A. Dod, Mr. and Mrs. T. W. East, Mr. W. R. Ellis (Assist. Sec., R.I.B.A.), Mr. P. G. Fairhurst (Pres., Manchester Soc. of Architects) and Mrs. Fairhurst, Mr. E. A. Ferriby, Mr. R. J. Gardner-Medwin, Lt.-Col. and Mrs. E. Gee, Mr. P. H. Grundy (Pres., Leicester and Leicestershire Soc. of Architects), Mr. W. H. Gunton, Mr. and Mrs. R. O. Harris, Mr. and Mrs. J. H. Haughan, Mr. Gordon Hemm, Mr. and Mrs. A. G. Henderson, Professor and Mrs. W. G. Holford, Mr. and Mrs. F. Holt, Mr. H. T. Hough, Mr. L. C. Howitt, Mr. and Mrs. T. Cecil Howitt, Mr. and Mrs. R. H. Kelly, Mr. and Mrs. I. M. Leslie, Mr. and Mrs. R. A. H. Livett, Mr. and Mrs. L. C. Lomas, Mr. and Mrs. S. H. Loweth, Mr. and Mrs. Edward Maufe, Mr. J. Nelson Meredith, Mr. and Mrs. B. A. Miller, Mr. and Mrs. A. Minoprio, Mr. H. Munthe-Kaas (Hon. Corresponding Member, R.I.B.A., Norway), Mr. R. Norval Paxton (Pres., West Yorks Society of Architects) and Mrs. Paxton, Mr. E. Quiggin, Mr. A. L. Roberts (Hon. Secretary) and Mrs. Roberts, Mr. and Mrs. J. J. Robinson, Mr. and Mrs. H. J. Rowse, Mr. and Mrs. H. T. Seward, Mr. P. Shepheard, Mr. A. Llewellyn Smith, Mr. and Mrs. Basil Spence, Mr. C. D. Spragg (Secretary R.I.B.A.), Professor and Mrs. Gordon Stephenson, Mr. C. G. Stillman (Vice-President, R.I.B.A.), Mr. J. B. Surman Mr. S. E. Urwin (President, Wessex Soc. of Architects) and Mrs. Urwin, Professor C. van Eesteren (hon. Corresponding Member, R.I.B.A., Holland), Mr. and Mrs. F. X. Velarde, Mr. Pembroke Wicks, Mr. and Mrs. V. Wilkins, Professor Leslie Wilkinson, Mr. Denis Winston and Mr. and Mrs Hubert Worthington.



ROBIN HOOD DRIVE JUNIOR SCHOOL, HARROW.

C. G. Stillman, F.R.I.B.A., County Architect, Middlesex; H. W. Burchett, F.R.I.B.A., Chief Assistant for Educational Buildings; G. S. Pester, A.R.I.B.A., Assistant Architect responsible for School.

THE NEW SCHOOLS EXHIBITION

By E. G. Adams, A.R.I.B.A.

In the following article is described the New Schools Exhibition, organised by the Exhibition sub-committee of the R.I.B.A. (chairman: H. V. Lobb, F.R.I.B.A.) and opened by the Minister of Education, Mr. George Tomlinson, M.P., on May 25. The exhibition, most comprehensively selected and mounted, remains open at 66, Portland-place, W.1, until June 19. (Weekdays, 10 a.m. to 6 p.m.; Saturdays, 10 a.m. to 5 p.m.)

THE outstanding importance of this Exhibition at the R.I.B.A. is evident when it is realised what a tremendous influence the future schools will exercise on the coming generations. These schools will be a considerable part of the future architectural programme and, what is more, there is every possibility of many being built when so many other schemes must, at the moment, remain on paper. They might be regarded as the vanguard of post-war architecture, of any scale, and in that role they should arouse popular enthusiasm by their quality of design, especially as they are so often intended to be the focal points of new housing neighbourhoods.

The schools displayed here are a far cry from many of those of the past with their barrack-like conditions, vividly portrayed on the historical screens. These consist of grim prints and photographs of regimented drilling and instruction and Victorian school halls with varnished hammerbeams and glazed brick dadoes. The chilling impact of the latter is reinforced by the caption, regrettably so true, that such buildings continue in use.

The contemporary architect must work in close collaboration with the educationist and provide an architectural framework for his methods of teaching. The views of the educationists have altered and developed so much that their incorporation into the Act of 1944 is said to have made 80 per cent. of the existing schools out of date. The changes the Act has brought about are made very clear in the screen on legislation. The suggested standards of the Board of Education pamphlet No. 107 of 1936 are contrasted with the statutory regulations for school premises issued by the Ministry in 1945. The school age has been extended, classes are to be smaller and equipment to be more generous. The area of Primary Schools will increase by 37 per cent. and that of Secondary Schools by 49 per cent. Such vastly risen standards in the face of our present economic difficulties and shortages of materials pose a very testing problem to the school architect. He must economise stringently and yet maintain high architectural standards. In consequence the utmost use of imagination and resource and thorough investigation into structural economy are called for.

The Ministry Regulations and Memoranda lay down the fundamentals of school design, but beyond them the individual conception comes into play, and the Exhibition demonstrates how this, influenced by considerations of site, may produce a variety of solutions. Modern trends in education, away from the mechanical inculcation of knowledge and towards a broader, freer training, have much in common with the greater freedom of contemporary architectural planning and expression. Stiff formality has been banished and schools are no longer monumental "public buildings" but are light and airy, with simple shapes and clean lines. Educational ideas have by no means finally crystallised, and flexibility of construction, of the sort obtained by using lightweight steel on a bay system, is a great improvement on the solidity of the old schools, now so inconveniently permanent.

LOUGHTON BORDER'S LANE JUNIOR AND INFANTS' SCHOOL.
H. Conolly, F.R.I.B.A., County Architect, Essex.

School Types.

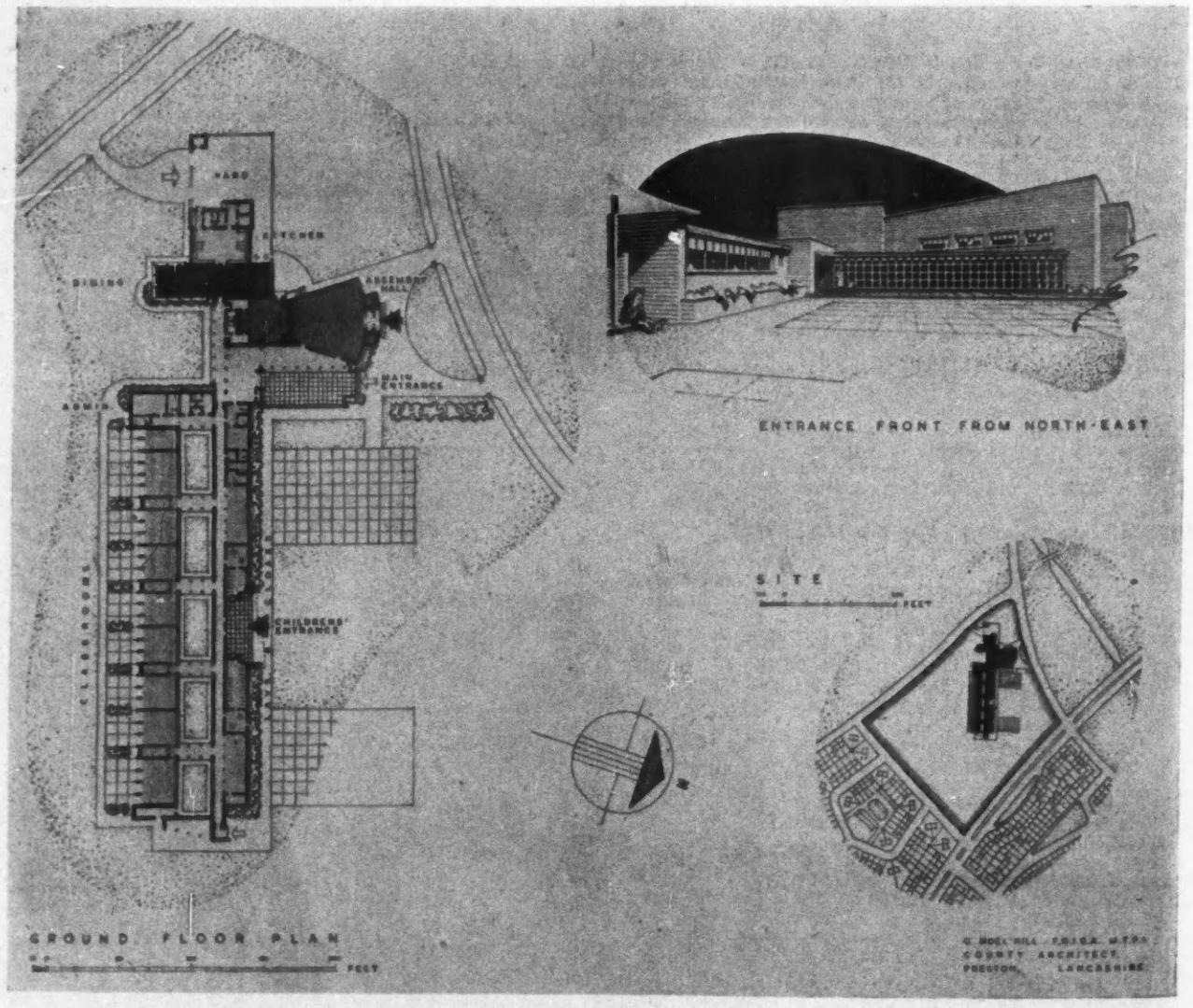
It is possible to divide school types into three main groups—nursery, primary and secondary. This has been done at the Exhibition, and each division has its own introductory screen on which is listed, first the accommodation needed, and second, the planning problems arising from any individual unit. On the list of elements of accommodation each unit is represented by a coloured block, and this distinguishing colour is used on the plans which follow, an excellent idea greatly assisting a quick appreciation of the schemes.

The nursery schools, which cater for children from two to five, present a small-scale problem because they are in units each with a recommended maximum of 40 children. Their smaller size is balanced by the need for careful attention to the details of their planning and furnishing. The Homerton College Nursery School, Cambridge, designed by F. M. Lutter, L.R.I.B.A., consists principally of two large playrooms with south walls completely fenestrated except for a low cill, forming a window seat. The garden, which in a nursery school is as important as the buildings, has all the exciting diversity it should have, in the shape of a sandpit, paddling pool and climbing steps.

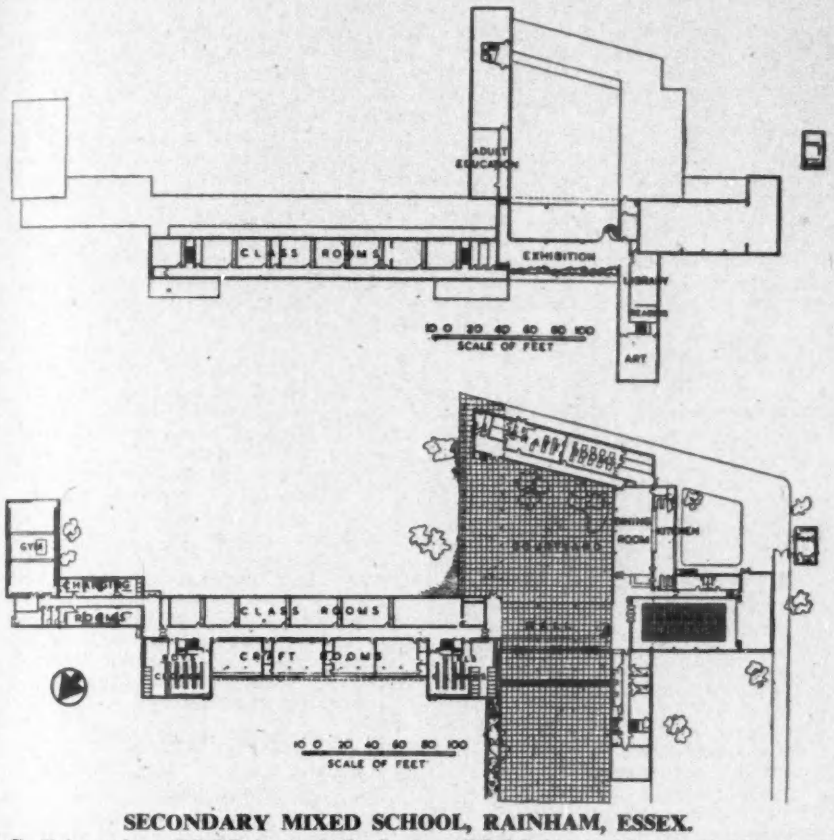
The primary school has a greater emphasis on the classroom, and in its layout embodies the basic ideas of modern school design. The usual plan is for the classrooms to have access from a circulation corridor and to have a south-east aspect looking out on to quiet areas of paving and grass for open-air lessons, whilst on the other side of the corridor cloakroom and lavatory accommodation is placed away from the classrooms and with easy access to the noisy playgrounds. In the County Primary School at Sidcup, by Hubert and H. Martin Lidbetter, in conjunction with S. H. Loweth, F.R.I.B.A., Kent County Architect, the classrooms branch out as "fingers" at right-angles to the main corridor, parallel to which run the lavatory blocks. This is a frequently adopted arrangement and effectively separates the noisy from the quiet zone. In this plan the kitchen and dining-room block are at the remote end of the corridor, but in schools which provide for both infants (5-7) and juniors (7-11) it often serves as a link between the two sets of classrooms, each of which has its own assembly hall. This layout has been adopted in the scheme for Robin Hood Junior School at Harrow by C. G. Stillman, F.R.I.B.A., Middlesex County Architect. The administrative block performs a similar function in the design of Loughton Borders Lane Primary School by H. Conolly, F.R.I.B.A., Essex County Architect, and runs north-south to couple together two parallel wings of classrooms, one for infants and one for juniors. Each has its own assembly hall and the communal dining-room and kitchen adjoin the infants' hall.

The classrooms in this school have an unrestricted prospect obtained by building them along the service corridor, and this suggests itself as an advantage over the court-like areas produced by the right-angle branches. In some schemes these seem too close together and may give rise to a cramped, enclosed feeling.

Field End School, Eastcote, by H. V. Lobb, F.R.I.B.A., has a long range of classrooms opening on to paved open-air teaching spaces separated by narrow strips of planting. The sanitary blocks project northwards as "fingers" from the corridor. The dining-room and kitchen are grouped with the entrance hall, and one yard and access road serves both. The present Ministry regulations practically force the architect to keep to a single storey and the resulting buildings are inclined to have subdued, horizontal lines which may blend admirably with the landscape, but sometimes need relief. At Field End School this is provided by a low, square tower over the entrance, which does not contrast too sharply. Other designs obtain this feature by a tower over the entrance or the stage of



NETHERTON JUNIOR AND INFANTS' SCHOOL, FOR LANCASHIRE C.C.
G. Noel Hill, F.R.I.B.A., County Architect.



SECONDARY MIXED SCHOOL, RAINHAM, ESSEX.
G. Fairweather, F.R.I.B.A., and R. Jordan, F.R.I.B.A., Architects; H. Conolly, F.R.I.B.A., County Architect.

the assembly hall, which itself, by its increased bulk, may form a bold accent in the composition. The fan-shaped hall of Netherton School by G. Noel Hill, F.R.I.B.A., Lancs County Architect, acts as a stop to the range of classrooms. The value of the hall as a community building is recognised by planning it with a prominent entrance direct from the outside. Grassed courts separate the classrooms from the corridor so that they are able to be fully lit from both long walls.

Secondary School Problem.

The problem offered by the secondary schools is complicated by the requirement of an area of classroom per child double that of the primary school. Practical and craft rooms outweigh ordinary classrooms in importance. The area for playing fields makes a big demand on the site and this, in conjunction with the size of the school, is likely to make a two-storey scheme the most economical, particularly in closely built towns. Superimposition of classrooms raises the question of daylighting, for some form of clerestorey or top lighting is essential to provide the 5 per cent. daylight factor recommended as a minimum by the Ministry regulations. Various ingenious arrangements have been devised to allow for two-storey planning whilst maintaining adequate lighting.

In the stimulating and unconventional design for Rainham Secondary School by G. Fairweather and R. F. Jordan, FF.R.I.B.A., for Essex County Council, in collaboration with Mr. Conolly, a central corridor separates south-facing classrooms from the craft rooms which are given a north aspect. By building the first-floor classrooms over the craft rooms, the ground-floor classrooms have unimpeded lighting and ventilation. The main entrance to a school makes a first impression, and consequently a deep one, and there should be an immediate note of pleasantness and cheerful dignity. This is achieved in the Rainham design by a paved forecourt from which a few steps lead up into an extremely spacious glazed entrance hall. Beyond is a tree-planted courtyard and pool. These are overlooked by the dining-room which has a view through a colonnade supporting a first-floor adult education wing.

The gymnasium obviously qualifies for the "noisy zone" of the plan and might be completely detached, as in the design for a mixed secondary school by Denis Clarke-Hall, F.R.I.B.A. Here there are two gymnasia, with ancillary changing rooms, placed across the play spaces and linked to the main corridor by covered ways. In this school the classrooms branch out obliquely on the quiet side of the corridor, gaining unobstructed light and view.

One of the largest schemes exhibited is that for the Langdon Crescent Schools designed by F. C. Ball, the Borough Engineer, and J. W. Taylor, Chief Assistant Architect, for the East Ham County Borough. The central feature is a great square piazza around which are grouped the communal buildings of theatre, medical unit, swimming baths, kitchen and dining-rooms. To the north is a grammar school for 550 boys and to the south are modern schools for 600 girls and 600 boys. The centrally placed medical unit with staff rooms over is surmounted by a slender lofty tower with more than a slightly Swedish air. It might be argued that a "multi-bias" school of this magnitude overawes the individual and tends to become inhumanly vast.

The gymnasia are isolated in E. B. Musman's design for Chislehurst and Sidcup County Modern School for boys by placing them in the middle of a court formed by workshops and classrooms. At this school the assembly hall opens on to terraces on both sides, one being a garden court with trees and pool, and provision made for the use of the hall by the public includes a cloakroom off the entrance and a near-by car park.

The Warrenwood County Modern Secondary School at Rochester designed by Yorke, Rosenberg and Mardall, again in collaboration with Mr. Loweth, is a fresh, clear-cut design with a well-integrated plan. The classrooms run as a tie between the entrance with adjacent assembly and dining halls, and the wing of practical rooms. Staircase access to the first-floor practical rooms saves corridors. The stores planned between the classrooms express themselves on elevation as a rhythm of plain wall surfaces punctuating the expanses of fenestration.

Technical education chiefly demands specialised accommodation and equipment and ample storage space, beside the general requirements of a school. The Hatfield Technical College by Easton and Robertson for the Hertfordshire County Council is an extensive building split into a technical college and a day school, each with its assembly hall over a dining hall and kitchen on the floor below. The

LITHERLAND GIRLS' SECONDARY (MODERN) SCHOOL.
G. Noel Hill, F.R.I.B.A., County Architect, Lancashire.

classrooms face south, at right-angles to the cloakroom corridor to create closed courts. The lower ground floor under the classrooms is used for cycle storage with access from a road passing centrally through the courts. A large engineering department, building departments and three gymnasia branch away from the classroom courts and are bounded by a service road.

The satisfactory school environment will be produced by sound technical competence in every sphere in addition to efficient planning and visual delight. The Exhibition treats this technical aspect fully. The screen on heating deals with choice of methods and stresses the need for generous thermal insulation to reduce the increased consumption of fuel required by higher standards. The increase in the size of windows to the present standard is shown on the panel on daylighting, which states that gloom, glare and brightness contrasts are to be avoided. There is an interesting miniature section to display the use of prismatic glass to direct light to reflecting surfaces. The school at Litherland by G. Noel Hill. Lancs County Architect, illustrates how a canopy and vertical screens may be designed as part of the fenestrated wall in order to cut out glare from the low-level sun.

Foreign developments are exhibited on four screens of photographs and cover schools varying from some rather starkly functionalist Czechoslovak ones to American examples like the Barstow Union High School in California, where the "egg-crate" baffled roof glazing diffuses the sunlight, and White Oaks Elementary School at San Carlos, where timber with a natural finish has been introduced for panelling and the trusses of the school hall roof.

The centrepiece of the Exhibition is a full-scale replica classroom which will be the envy of any school child who comes its way. It is panelled in pink and white with aluminium strips, brilliantly lit—with fluorescent lighting over the blackboard—and is furnished with a selection of chairs and desks including some very smart ones with cast light-alloy frames. The furniture section of the Exhibition has been organised by the Council of Industrial Design. Toys and toy cupboards and a very gay blue and red "slide" brighten the nursery corner of the furniture.

The scope of the Exhibition and the successful and lively way in which it is presented are a tribute to the zeal and enthusiasm of the voluntary organisers. The Exhibition handbook is at the same high level and is not a mere catalogue but a series of informative and well-illustrated articles that summarise and elucidate the message of the Exhibition.

ARCHITECTURAL ASSOCIATION

EXHIBITION OF SCHOOL WORK

How much work an architectural student does during his period of training depends very largely upon the enthusiasm imparted to him by his tutors. Brilliant, comprehensive, copy-book lectures have their merits, but when they have been given the subject is closed; nothing remains to be said or done, except the inevitable exercise. The more imaginative teacher, however, picks out the highlights of his subject and so embellishes the gaps that students' interest is awakened and they seek further information. They ask questions of themselves and supply their own answers; they set themselves problems and, because they are interested, shift heaven and earth to find solutions. Meantime, the next lecture has been given and so the process goes on along the highway of school life, with the students following along behind, exploring all the side streets, lingering at the corners, fretting in the traffic jams. Casualties there are, and must be. Everybody has two legs, but not all are fleet of foot. Who is to say that the survivors do not make far better architects than those who take the by-pass route sign-posted by the copy-book lectures?

Some such thoughts as these were brought to mind during a recent visit to an exhibition of school work at the Architectural Association. Even a cursory glance around the exhibition room left little doubt regarding students' enthusiasm. The amount of syllabus work done by them during the five years of training is prodigious, yet they find time, though it must often be long after midnight, to make superb models of the buildings they design. A well-known architect once said: "If you can draw a tree and a human figure, you can draw anything." At the exhibition were full-size sheets of drawings of trees, excellent in quality. Enthusiasm produces such work, not a teacher saying: "Go out and draw some trees."

Two or three years ago it might have been said that drawing ability at the A.A. was below average. Not so to-day, although there are still vestiges of the meticulous draughtsmanship which experience will displace in favour of a more confident and flowing style. The work shown on the walls in the basement of the A.A. headquarters in Bedford-square denoted the complete five-years' curriculum of school work, but in the centre of the room the models told the story of the students' enthusiasm for that work. They reflected great credit on the teaching staff as well as the students, and one could not help but think how such results were deserving of quarters less overcrowded.

BARSTOW UNION HIGH SCHOOL, CALIFORNIA, U.S.A.
Franklin, Kumph and Falk, Architects and Engineers.

BOOK REVIEW

LIVERPOOL: PAST, PRESENT, FUTURE. By J. F. Smith, Gordon Hemm and A. Ernest Shennan. Liverpool: The Northern Publishing Co., Ltd. Price 12s. 6d., post free.

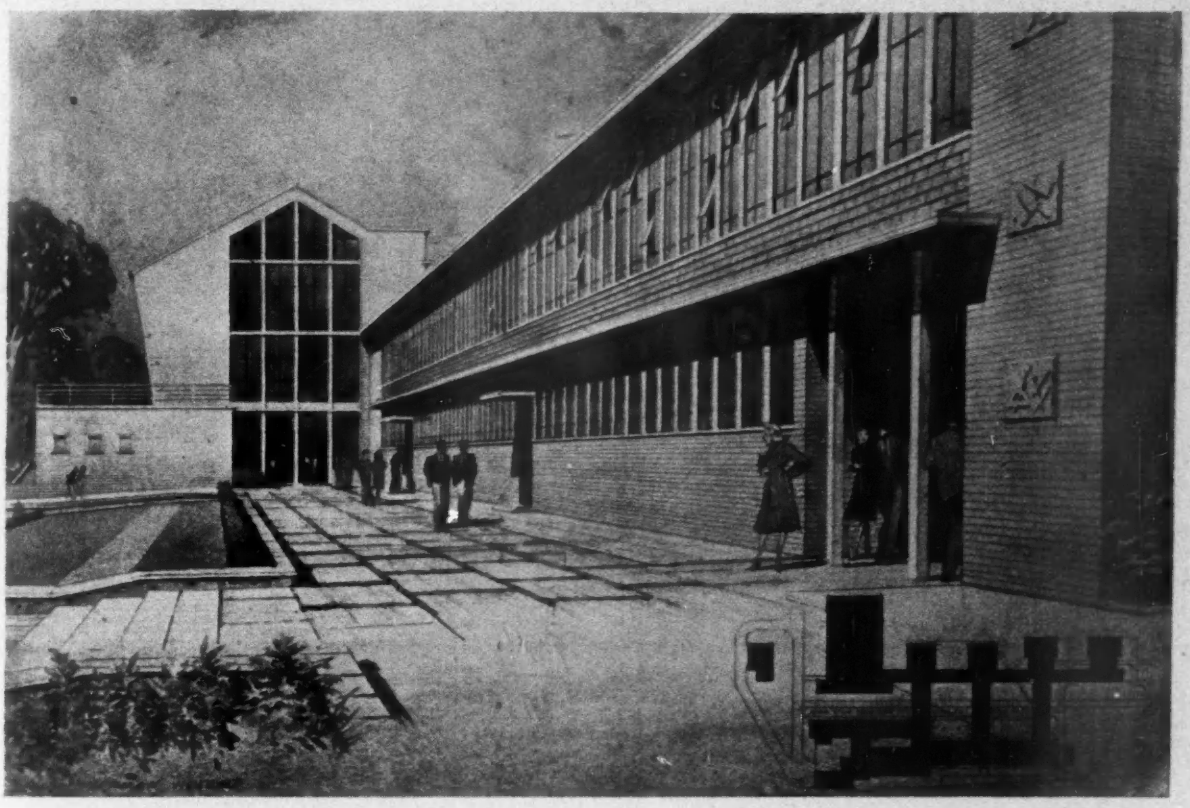
Coinciding with the R.I.B.A. Conference at Liverpool, this book makes a timely appearance, and will no doubt be welcomed by many as an interesting and attractive souvenir of the very successful meeting held there last week-end. Mr. J. F. Smith, the City Librarian, tells the story of Liverpool's growth from a fishing village to the great port of to-day; Mr. Gordon Hemm, a well-informed guide, takes the reader on a quick and comprehensive tour of the city, pointing out its many features of architectural beauty and interest; and Alderman Shennan, himself an architect and town planner of distinction, sets out the proposals for Liverpool's future development.

The book, which is well printed on art paper, is profusely illustrated by drawings, photographs and maps. Mr. Hemm, who edits the volume, reproduces many of his admirable drawings of the city and its fine buildings, including one of the waterfront, in colour; and selected drawings from the city's historical collection of watercolours are also shown. Future planning proposals are well illustrated from models, and a map of 1725 makes interesting comparison with the City Engineer and Surveyor's plan for the new central Liverpool. As Lord Woolton says in a foreword, the book "provides both a guide to the past and present and encourages a stimulating vision of the future of a city worthy of its high tradition."

BOOKS RECEIVED

THE STUDENT'S LETAROUILLY ILLUSTRATING THE RENAISSANCE IN ROME. Edited by Prof. A. E. Richardson (London: Alec Tiranti, Ltd.). Price 12s. 6d.

BUSINESS METHODS AND ORGANISATION FOR HOUSE BUILDERS AND CONTRACTORS. By A. W. Hopkins, A.C.C.A. (London: Ken-Pax Publishing Co., Ltd.). Price 12s. 6d. net.



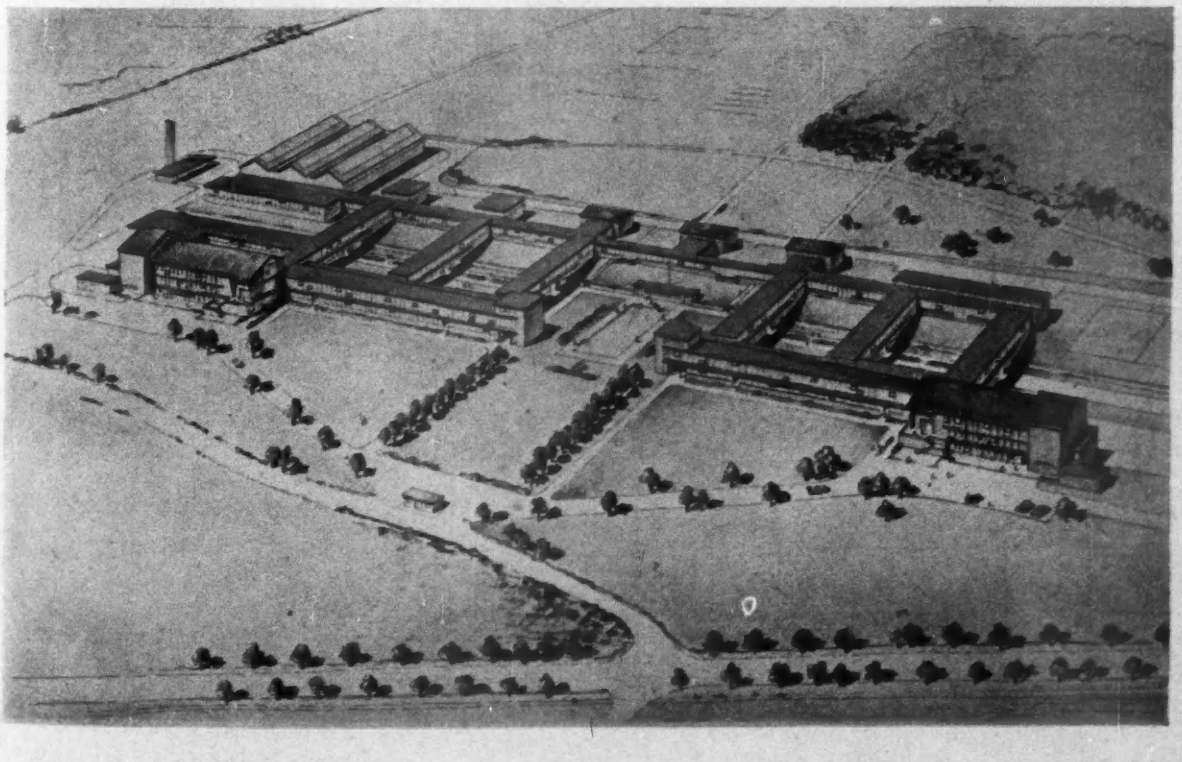
View of West Front of Administrative Block. *Below*: **The scheme as completed**

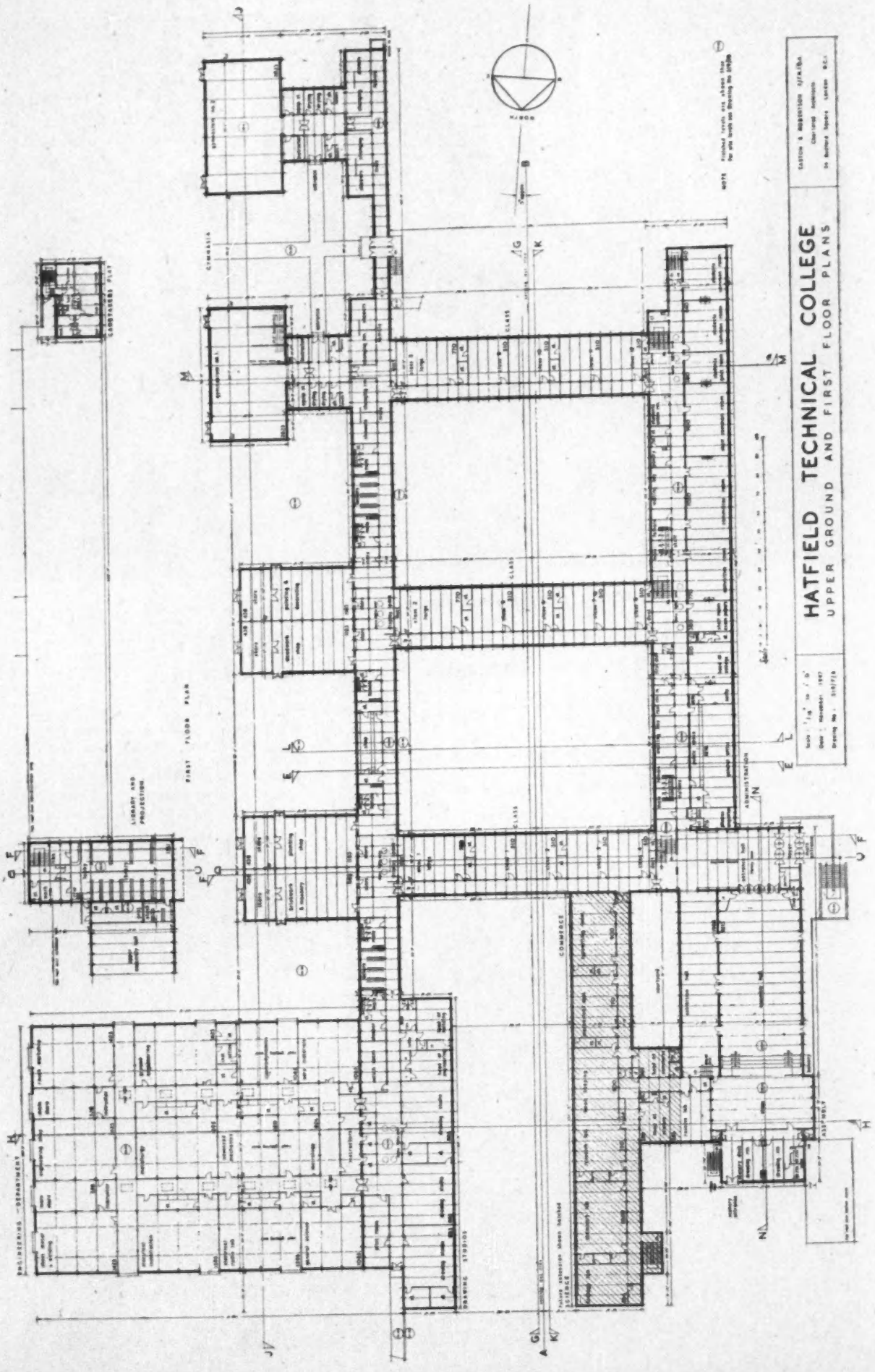
HATFIELD TECHNICAL COLLEGE:

EASTON AND ROBERTSON, FF.R.I.B.A., ARCHITECTS

THE HATFIELD TECHNICAL COLLEGE IS THE FIRST of the large post-war buildings of its type. It will cater for students from a large area under the Hertfordshire County Council, the Chief Education Officer for which is J. H. Newsom, well known for his work in improving education and for his high regard for architectural standards.

The building is designed for a site of 90 acres close to Hatfield, off the Barnet By-pass. The scheme includes a day technical school on the same site, the original programme calling for complete independence of administrative and teaching facilities with, however, the possibility of sharing some of the latter if desired. In the event of long delay in building the




HATFIELD TECHNICAL COLLEGE
UPPER GROUND AND FIRST FLOOR PLANS
FIRST FLOOR PLAN
LIBRARY AND PROJECTION
ADMINISTRATION
COMMERCE
ENGINEERING - DEPARTMENT
DRAWING STUDIOS

BRITISH ARCHITECTS' CONFERENCE, LIVERPOOL, 1948

A PHOTOGRAPHIC RECORD

Photo by Associated Photo Services, Liverpool.

The scene inside Liverpool Cathedral on Sunday morning, May 30, when the Banner of the Royal Institute of British Architects was offered by the President, Sir Lancelot Keay, to the Cathedral and accepted by the Dean, the Very Rev. Dr. F. W. Dwelly.

Photograph by Panora, Ltd., London, W.C.1.

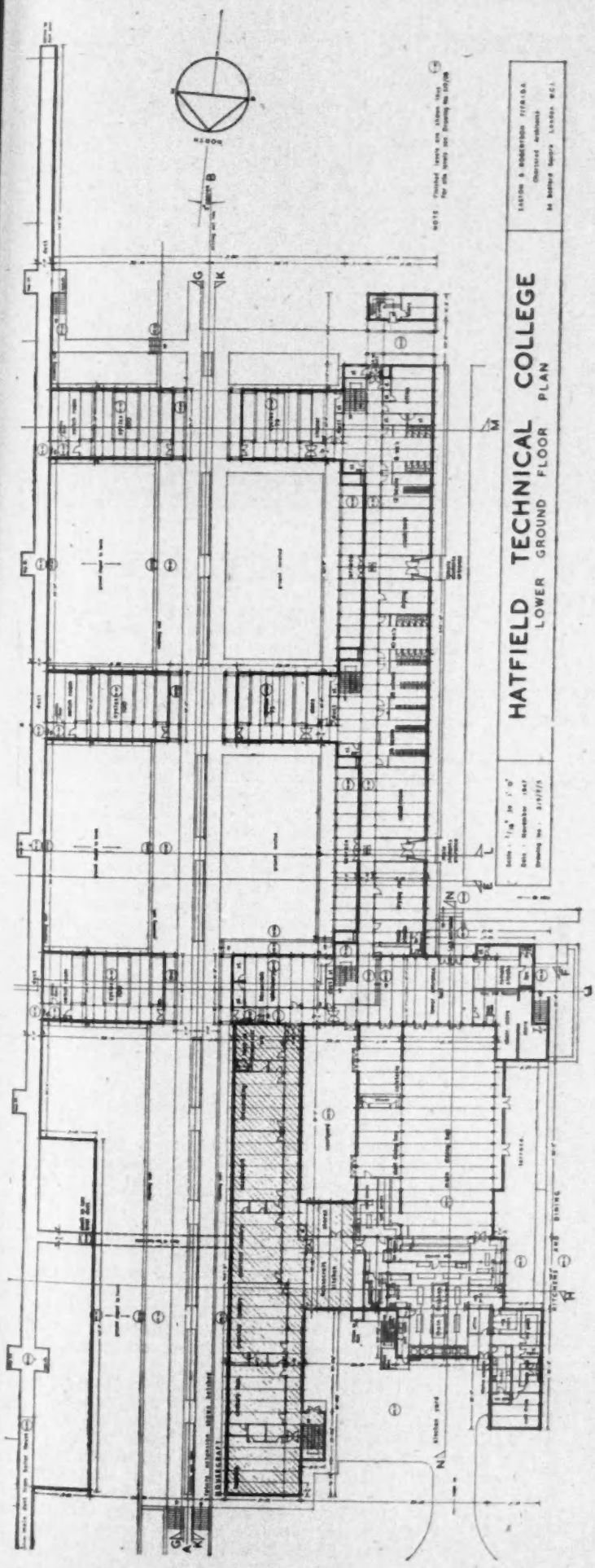
THE BRITISH ARCHITECTS' CONFERENCE, LIVERPOOL, 1948.

(The right-hand portion of the upper pa

948. Conference Photograph, taken on Friday, May 28, outside St. George's Hall.
er pa[illegible] on" to the left-hand part of the lower.)

Photo by Panora, Ltd.

CENTENARY GROUP PHOTOGRAPH OF THE LIVERPOOL ARCHITECTURAL SOCIETY, taken at St. George's Hall, Liverpool, on May 28, 1948.



day school, the architects have designed a college which can stand independently as a complete entity, though the possibility of eventual completion of the scheme has obviously influenced the general composition, which is both formal and flowing.

The site shows considerable differences of level, and the dictates of orientation have not made any easier an economic utilisation of the contours. Nevertheless, desirable aspects have been possible for the majority of the rooms and departments, with the classrooms slightly east of south. The levels have naturally had a major influence on the plan conception, resulting in the placing of the bulk of the teaching-rooms and workshops on a single level, with cloakrooms, bicycle stores, the kitchen and canteen, etc., at a level some 10 ft. below at the approach level from the by-pass road.

The assembly hall, situated over the dining-room, can be separately used for community purposes, as also the library planned above the assembly crush hall. The dining-room includes a cafeteria and a separate staff bay; its kitchens are accessible to the domestic science wing which, together with the commerce section, will be completed in a second stage. There is a high-level approach to the assembly hall from the exterior, as well as an internal access from the lower entrance level. The assembly hall seats 750, and the main dining-hall caters for 350 in two sittings.

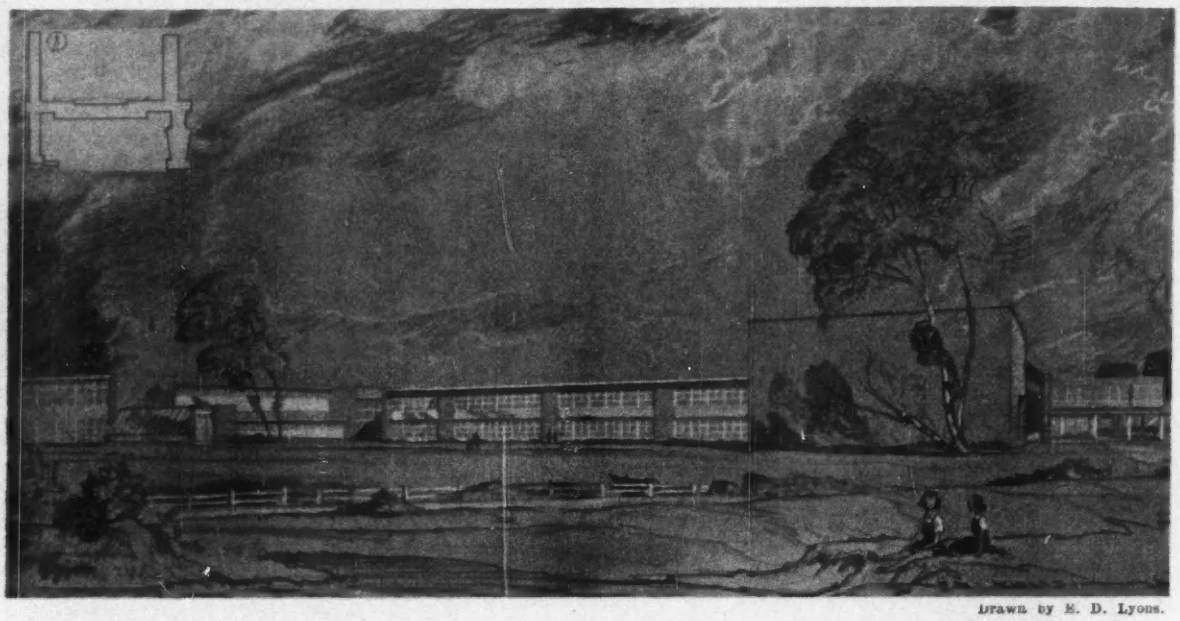
With regard to the method of construction at the time when the sketch plans were first approved, the architects were constrained by the authorities to utilise not only a very minimum of steel but to refrain from the use of any quantity of brick as well. At the same time they were urged to devise a method of construction providing a maximum of off-site works.

As an answer to these restrictions the architects, with their consulting engineer, Mr. Felix J. Samuely, have devised a system of precast concrete construction which utilises posts and reversed truss beams with minimum reinforcement for the main runs of building, the spans varying, but the run of spacing being based on a uniform 5 ft. 6 in. grid of centre to centre. The floor slabs and the eaves units are specially designed and prefabricated, and it is hoped that by an extensive use of such units, plus a certain amount of *in situ* casting of the larger span trusses, site labours will be considerably reduced. The use of such units has, however, called for a certain rigidity of spacing and planning, and the design generally has entailed considerable research into problems which in more normal construction would be avoided.

In order to speed the work of erection and the preparation of drawings, the contract has been subdivided, and work is starting on a separate foundation contract which can proceed while the work of prefabricating units of the superstructure is under way.

The superstructure will have an infilling between the concrete posts of lighter materials as well as of brick, and cedar shingles are specified for portions of the claddings and pitched roofs. The ceilings of the teaching-rooms are of fibre board attached to the steel ties of the reversed concrete trusses, and the resultant air space is utilised for insulation and the passage of pipes and conduits. For the lighting and heating installations the consulting engineers are Edward A. Pearce and Partners. It is intended to employ floor heating for the classrooms, convectors for the corridors, and various types of unit heaters for the larger shops.

The engineering section—a fully developed one in view of the teaching demand—will be treated along modern factory lines; and the building department has been given the form of isolated pavilions to permit of easy access and flexibility for future alterations or additions. Two of the gymnasium blocks are a part of the college scheme; the third would be allocated to the day school. A swimming-bath, centrally located between the college and the school, forms part of a possible future development. Finally, in planning the day technical school, the same units of construction are envisaged, utilising the same processes.



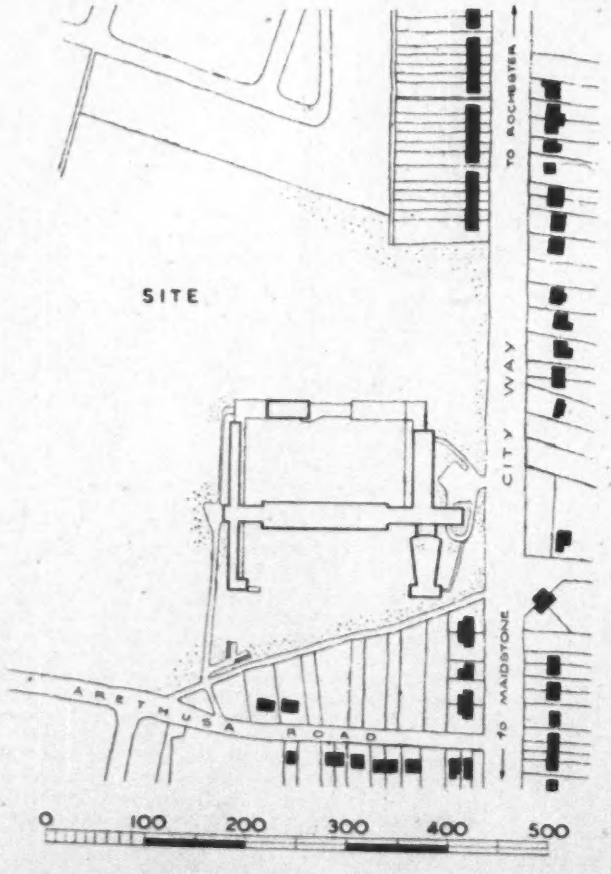
Drawn by E. D. Lyons.

COUNTY MODERN SCHOOL FOR GIRLS, WARREN WOOD, ROCHESTER

F. R. S. YORKE, F.R.I.B.A., E. ROSENBERG, L.R.I.B.A., and C. S. MARDALL, A.R.I.B.A.,

Architects, in collaboration with

S. H. LOWETH, F.S.A., F.R.I.B.A., KENT COUNTY ARCHITECT



THE SITE OF THE WARREN WOOD COUNTY Modern School for Girls, Rochester, is on City Way, about one mile from the centre of Rochester, on high ground overlooking the city and the Medway. The school is designed to accommodate 600 girls.

The buildings are placed on the flattest part of the site, which slopes away steeply to the north and west. The entrance for vehicles is from City Way, but the girls enter from a side road.

The assembly hall, which will be used occasionally by the general public, and the dining-kitchen unit are near the main entrance. The staff and administration unit is over the main entrance and hall. Classrooms are grouped in the central block and face south-east. Ground-floor cloakrooms and corridors, immediately behind the classrooms, have an open light, and first-floor classrooms are approached well above and by bridges across this well, between the lavatory and classrooms block, so that the ground-floor classrooms have clerestory windows to provide cross-lighting and cross-ventilation. The practical room block is two storeys high, but the corridor is single storey, and first-floor rooms are reached in pairs by staircases from the ground-floor corridor. This arrangement also enables clerestory windows to be provided to the ground-floor rooms.

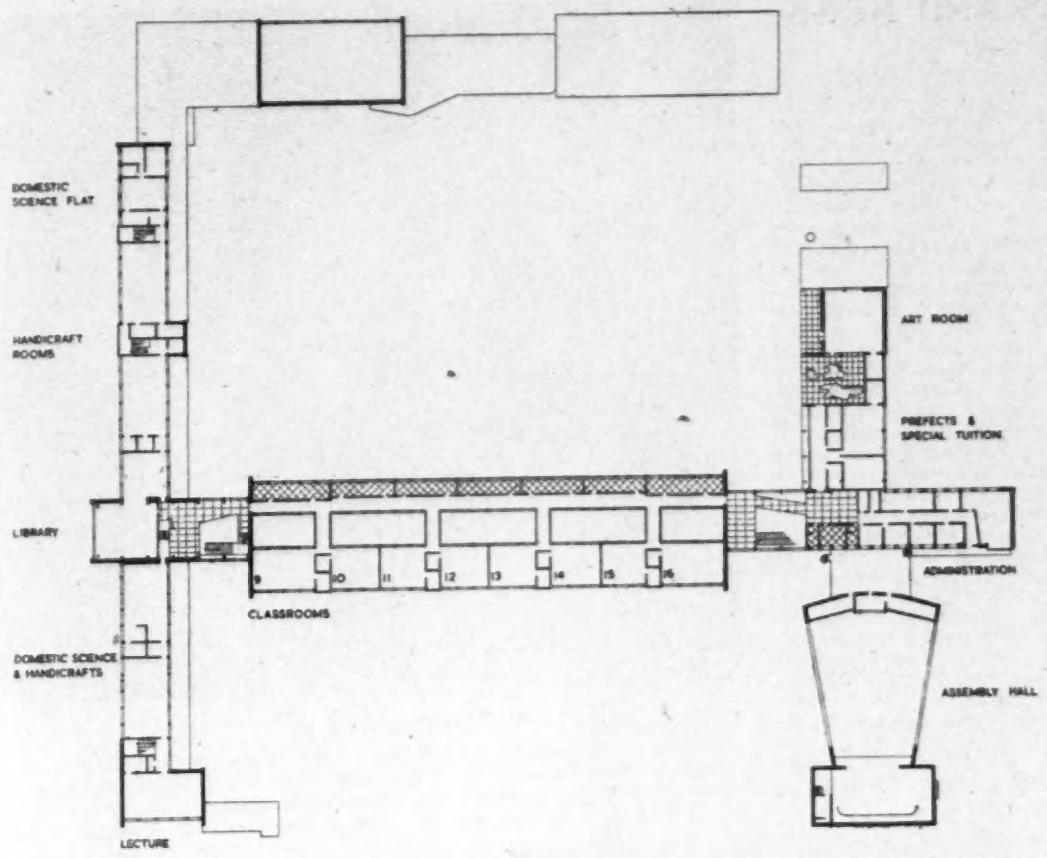
The playground is to the north of the classroom block, where it is not overlooked by any teaching rooms.

The classroom and practical room blocks are planned on an 8 ft. 3 in. grid, and are constructed with a light, welded steel framework, faced externally with 8 ft. 3 in. by 1 ft. 4 in. by 2 in. concrete slabs.

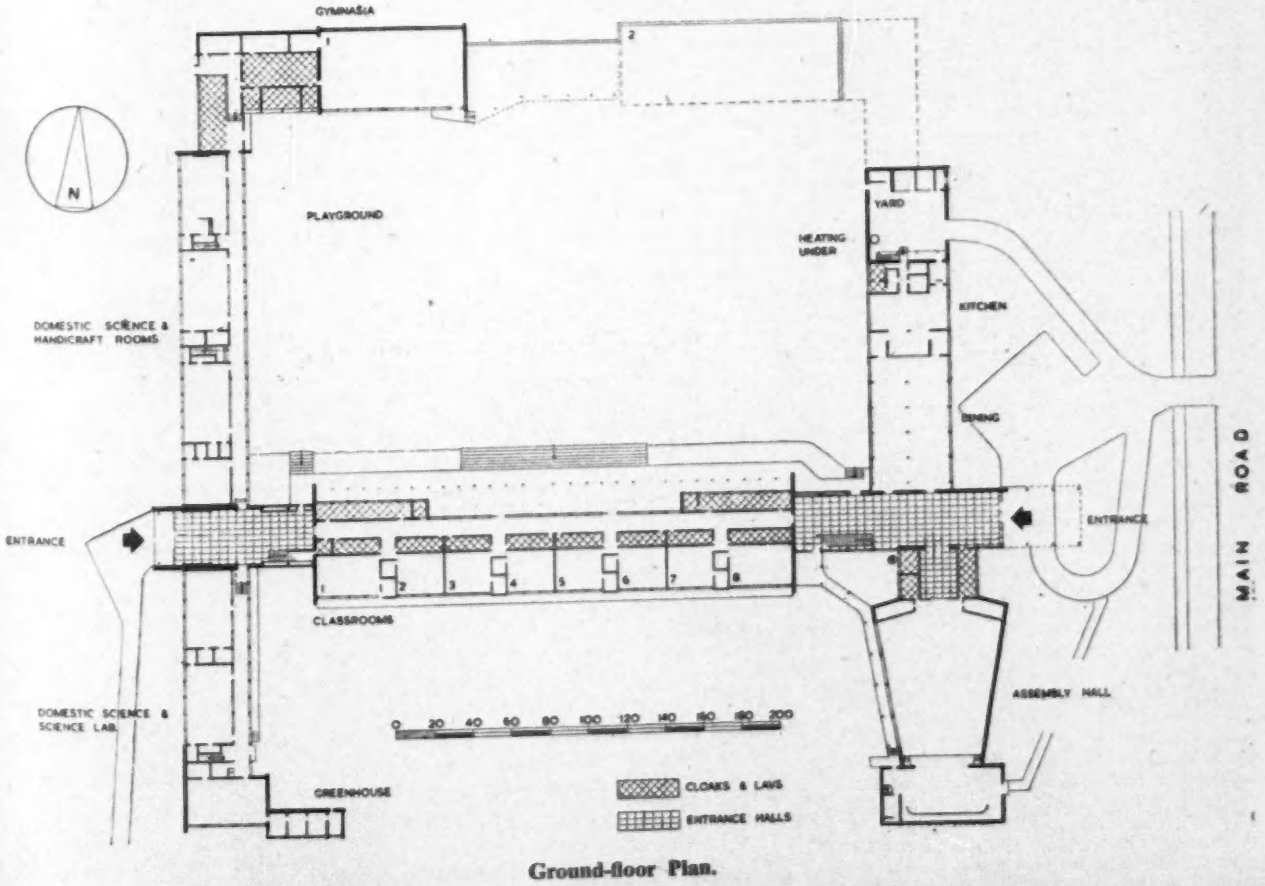
Floors and roof are constructed with 8 ft. 3 in. by 1 ft. 4 in. pre-cast concrete units spanning between the steel beams. The east and west entrance blocks are constructed in reinforced concrete, and expansion joints are provided where the concrete joins the steel structure. The assembly hall and kitchen-dining unit are also reinforced concrete.

The roof slabs are covered with built-up bituminous roofing with spar finish on ½ in. insulation board. Ceilings are ½ in. insulation board or 1 in. wood-wool slabs. Yellow stock brickwork is used instead of concrete slabs on the end walls of all major blocks. Windows are steel with Arens control, or push-out cam openers.

The consulting engineers are Messrs. Hoare, Lea and Partners and the quantity surveyors are Messrs. Davis, Belfield and Everest.



First-floor Plan.



Ground-floor Plan.

COUNTY MODERN SCHOOL FOR GIRLS, WARREN WOOD, ROCHESTER

NOTES AND NEWS

Merton Priory Walk.

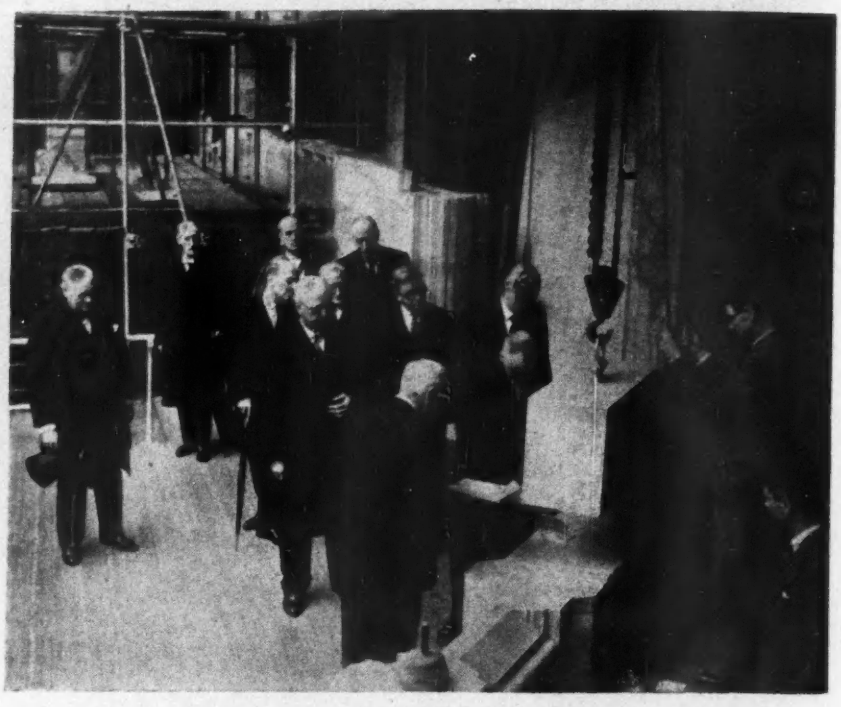
WHEN Henry VIII pulled down Merton Priory in order to get materials with which to build Nonsuch Palace at Ewell, he left few traces of a great building that had played a notable part in English history. All that remains visible to-day is part of the old boundary wall, about 100 yds. in length, the chief feature of which is a Norman gateway, crowned by a weathered stone parapet having a curious pediment-like coping with a block-and-ball finial. The wall, which is built generally of rubble with a facing of knapped flints, some dressed stone and a brick parapet, has obviously been much patched and repaired during its 800-odd years of existence. It badly needs attention to-day. In one place there is a hole about 12 ft. wide, and elsewhere another about 6 ft. wide. In both places the parapet looks as though it might collapse at any moment. Lamentably, the Norman gateway is closed up with a sheet of corrugated iron. A local history records that in 1924 some boys playing on the wall broke part of it down, to disclose some ancient parchments, which they promptly destroyed. The breaking-down process still goes on. The wall, we believe, is scheduled as an historic monument. If this is so, we suggest that the Ancient Monuments Branch of the Ministry of Works should give it some attention before further damage is done.

Old Merton.

MERTON to-day is, for the most part, a typical nineteenth-century London suburb, and although the old glory has departed there is still much in the neighbourhood to interest the topographical antiquarian. Of the Priory, which was built in 1114 of stone and flint, nothing remains on the site to-day, as we have said, but the length of old boundary wall. The building stood where the disused Merton Abbey railway station now stands, and excavations carried out a few years ago revealed foundations of considerable extent. Thomas à Beckett, afterwards Archbishop of Canterbury, was educated at the Priory, and Walter de Merton, Bishop of Rochester, Chancellor of England in 1277 and founder of Merton College, Oxford, was born and bred there. Parliament sat at the Priory in 1236 and passed the famous Statutes of Merton. King Henry VI was crowned there in 1437.

Merton Place, where Nelson and Lady Hamilton lived, is no more than a memory, but Wandle Bank House (the residence of Nelson's friend Mr. Perry, editor and proprietor of "The Morning Chronicle"), where the Admiral often went to fish for trout, still stands in its grounds, which are now a public park. For further tangible witness of Nelson's life at Merton the pilgrim must go to the ancient parish church of St. Mary the Virgin, where, hanging in the nave, he will find the Admiral's hatchment, and, near the chancel, the wood seat on which Nelson and his lady used to sit when, as they often did, they went to church.

A visit to the church is well worth while to see the remarkable Norman doorway, with its columns set inside the springings of the arch, and the fine gateway of the Guest House of Merton Priory (c. 1175), which, discovered during excavations in 1914, was restored and re-erected in the churchyard as an entrance to the vicarage in 1935.



THE NEW HOUSE OF COMMONS.

The Speaker, Colonel D. Clifton Brown, laying the foundation stone of the new House of Commons. Also in the picture is Sir Giles Gilbert Scott, O.M., R.A., architect of the new House, and immediately behind him are Mr. Attlee, Mr. Key, Minister of Works, and Mr. Herbert Morrison. Mr. Churchill is on the left.

Hawksmoor in Stepney.

"EAST of the City Sir Christopher Wren's empire comes to an end and Nicholas Hawksmoor's kingdom begins." Those who heard the B.B.C. talk on Hawksmoor's Stepney churches would doubtless have agreed with this remark of Mr. William Townsend. Hawksmoor's three churches in this borough are among the most remarkable of our London churches. They are: St. Anne, Limehouse, St.-George-in-the-East, and Christ Church, Spitalfields. These three churches have long been landmarks in this part of London. Standing in their churchyards, they form charming oases amid the somewhat grim pattern of this quarter of the Metropolis, quiet retreats from the roar of dockland traffic beyond. It would be difficult indeed to imagine Spitalfields without its Christ Church, for Hawksmoor invested it with a spire of extraordinary beauty. In Limehouse, unsalubrious though its surroundings may be, the church of St. Anne rises gracefully above the tallest masts of ships at the near-by riverside. The magnificent tower of St. George-in-the-East has to be seen to be appreciated. This would indeed be a colourless part of London if Hawksmoor had not designed these three churches; they have scale and an unmistakable urbanity, and their detail is beyond reproach. Moreover, they were designed by an artist who, despite his larger work at Oxford, Bloomsbury, and Castle Howard, never did anything better from the viewpoint of purity of form.

R.A. School of Architecture.

THE Royal Academy School of Architecture is a day school for not more than ten students who have taken a British University degree in Architecture or have passed the final examination of the Royal Institute of British Architects. Qualified students may be accepted for an advanced course of training comprising an intensive study of civic architecture and the preparation of designs for buildings of national importance. The course is for one year and is gratuitous. The students will compete each year for a Royal Academy Grand Prize of £300, and a second prize of £150 presented by Lord Fairhaven.

Students who wish to take this course for the year 1948-49 should apply to the Secretary, Royal Academy of Arts, Piccadilly, W.1, stating their age and qualifications, and should send with their application a portfolio of studies and designs, on Monday, July 12 next. Selected candidates will be invited to an interview with the Director of the School, Professor A. E. Richardson, R.A.

The Liverpool Repertory in Town.

THE Liverpool Repertory Company, of which Sir Charles Reilly was so enthusiastic a supporter, opened a fortnight's season of "The Cherry Orchard" at St. James's Theatre, S.W., on Tuesday night. Of the play the "News Chronicle" says: "This production—the first in London since 1941—absolutely must be seen by every London playgoer worthy of the name. Also it happens that 'The Cherry Orchard' is immeasurably the best play now running in London."

The production has a special interest for architects in that a member of the cast is Charles Crichton, A.R.I.B.A., who joined the company two years ago on demobilisation from the R.N.V.R. Many will recall his work in the pre-war days of the R.I.B.A. Dramatic Society. Mr. Crichton acts under the name of Iain Crichton.

Architects' Estates.

THE late Professor Sir Charles H. Reilly, who died on February 2, left £40,355.

The late Mr. J. C. Dewhurst, architect, left £11,137.

County Architect Required.

APPLICATIONS are invited from registered architects for the appointment of Cornwall county architect at a salary of £1,560 a year, rising by one increment of £75 and another of £100 to a maximum of £1,735 a year. Forms of application, together with further particulars of the appointment, may be obtained from Mr. E. T. Verger, Clerk of the Council, County Hall, Truro. Applications must be received by June 18.

Architect Appointed Professor.

MR. STEPHEN WELSH, M.A., B.Arch. (Lvpl.), F.R.I.B.A., has been given the title and status of Professor of Architecture by Sheffield University Council.

Professional Announcements.

ON and after May 24, MESSRS. MILNER AND CRAZE, FF.R.I.B.A., will conduct their practice from Flat "Y," 3, Buckingham Gate, Westminster, London, S.W.1 (telephone: Victoria 6304).

MR. RICHARD MELLOR, F.R.I.B.A., has been appointed architect to the Leeds Regional Hospital Board, and took up his duties on June 1. On and from that date his address is at the offices of the Board, 29/31, Eastgate, Leeds, 2 (tel.: Leeds 32281-3).

MR. WILLIAM H. B. COTTON, deputy county surveyor of Nottinghamshire, has been appointed county surveyor in Durham in succession to Mr. William J. Merrett, who has retired. Mr. Cotton has been deputy surveyor with Nottingham county council for three years and assistant engineer for the previous five years.

MESSRS. SMITH AND BOWL, quantity surveyors, of Terminal House, Grosvenor-gardens, S.W.1, have opened a branch office at 17, Portland-square, Plymouth, and would be pleased to receive catalogues and price lists at that address.

MR. N. S. SUTHERLAND, F.I.A.A. and S., who has been appointed burgh architect and town planning officer of Kilmarnock, Ayrshire, would be pleased to receive trade catalogues, etc.

COMING EVENTS

Monday, June 7.

THE SANITARY INSPECTORS' ASSOCIATION.—Annual Conference. Empress Ballroom, Winter Gardens, Blackpool. 10 a.m. (Sessions continue until June 11.)

Tuesday, June 8.

EASTERN FEDERATION OF BUILDING TRADES EMPLOYERS.—Half-yearly Meeting. Speaker, Mr. F. M. Sleeman. Palace Hotel, Southend.

THE HOUSING CENTRE.—Exhibition of Metropolitan Housing Layouts. Opening by the Rt. Hon. Lewis Silkin, M.P. 4 p.m. (On view until June 26.)

THE INTERNATIONAL INSTITUTE OF WELDING.—(In conjunction with the Institute of Welding.) Inaugural Meeting. Brussels. (Sessions until June 11.)

THE INSTITUTION OF GAS ENGINEERS.—A.G.M. First meeting in Friends' House, Euston-rd., N.W.1. 10 a.m. (Sessions continue till June 11.)

Wednesday, June 9.

TOWN AND COUNTRY PLANNING ASSOCIATION.—"The Farringdon Report," by the Rt. Hon. Lord Farringdon. 28, King-street, W.C.2. 6.15 p.m.

L.M.B.A. Central No. 1 Area meeting.—Miss Margaret Wolfson, B.Sc., Central Office of Information, on "The National Insurance Act, 1946." Derry and Toms Restaurant, W.8. 1 p.m.

Thursday, June 10.

ROYAL SOCIETY FOR THE PREVENTION OF ACCIDENTS.—National Industrial Safety Conference. Royal Hotel, Scarborough. 7 p.m. (Sessions continue until June 13.)

Saturday, June 12.

THE ROYAL INSTITUTION OF CHARTERED SURVEYORS.—Junior Quantity Surveyors' summer meeting. Cruise from Tower Pier. 2.30 p.m.

TOWN AND COUNTRY PLANNING ASSOCIATION.—One-day school. Central Library Theatre, Sheffield. 10.30 a.m.

FROM "THE BUILDER" OF 1848

Saturday, June 3, 1848.

GLASS WATER-PIPES.—The Town Council of Plymouth have resolved on laying down glass pipes for the supply of water to the town. The average duration of pipes made of cast iron is about ten years, it is said, while glass is not liable to corrosion or abrasion at all and will thus, it is calculated, more than repay its original cost.

LIVERPOOL PHILHARMONIC HALL. HERBERT J. ROWSE, F.R.I.B.A., ARCHITECT.

Seen above is the Grand Foyer of the Philharmonic Hall where on Sunday last a special concert was given for the British Architects' Conference by the Liverpool Philharmonic Orchestra under Sir Malcolm Sargent.

BRITISH ARCHITECTS' CONFERENCE

The British Architects' Conference closed at Liverpool on Sunday night. Below are given summarised reports of the paper read by Professor Gordon Stephenson on "The Place of the Architect in the Building of a New Town and in Redevelopment," and that on "Community Centres" by Mr. Arthur Llewellyn Smith. A journal of the other conference events and a report of the Conference Dinner, held on Saturday night in St. George's Hall, begins on page 665.

New Towns and the Architect

ON Friday morning, PROFESSOR GORDON STEPHENSON, B.Arch. (Liverpool), F.R.I.B.A., A.M.T.P.I., read a paper on "The Place of the Architect in the Building of a New Town and in Redevelopment." After giving a lucid and entertaining historical survey of the development of new towns, Professor Stephenson said:

I think it is fair, and to-day most appropriate, to say that the City of Liverpool in the last 20 years has continued to make history, and its record as a pioneer is undiminished. Since the passing of the Housing and Town Planning Act of 1919 it has taken giant strides away from the nineteenth century. It was after the appointment of our President, first as Director of Housing and then as City Architect, that we began to see a gradual change in the concept of "housing." Before the last world war the city had under construction a great scheme for the redevelopment of a central neighbourhood immediately behind the Civic buildings on William Brown-street, and a new satellite town at Speke. It is Speke which is of more than usual interest, for Liverpool, in traditional manner, found that existing legislation was not far enough in advance. In a private Act special powers were taken to build a balanced community. They included all the main powers which are vested in the New Town Corporations except the important one concerning location, which can, for obvious reasons, be vested only in a Minister. At Speke we can see revolutionary principles being established. The plan is quite different in concept from that of the normal housing estate. In the first place it allows for considerable industrial development adjacent to the residential area, and much of the new industrial building is undertaken by the City Architect to provide factories which may be rented. In the second place all through traffic roads bypass the new community. In the third place Speke has a physical heart and therefore will develop a soul and spirit of its own. Finally, provision is made for all kinds of residential accommodation, including some for middle income groups and old people.

We hear whispers nowadays that the central government would like to see three-storey houses in housing schemes. Some have already been erected in the Central-avenue at Speke. This is really important pioneering. I am certain in my own mind that houses will have to be provided in central areas, and here is a prototype. Before very long the central government should be pressed to change the financial clauses of the Housing Act to permit flats to be built on new land and houses in reconstruction areas. Without using any more land we could then have higher densities in the suburbs and lower densities in congested central areas. This would bring social benefits and a truer architectural expression of the richness and variety in community life.

To the distinguished pioneers in new town building, Unwin, Barry Parker, de Soissons and our President, the younger architects entrusted with the planning and building of New Towns owe much. To the anonymous architects of the Ministry of Town and Country Planning and the Ministry of Health we are also indebted. They, like Unwin, in a previous generation, have kept the architectural idea alive in central government while great changes were taking place.

I am moved to make this tribute after reading in the *Journal* of this Institute a remark reported to have been made by one of the architects working on a New Town plan. He said: "If there were five Ministries less we could build this town." This chance and rather arrogant remark, which was reported, illustrates an attitude which weakens our profession. If we respect each other we are on firm ground. If we respect other people and their views we are on even firmer ground. If we think deeply as well as feel strongly we will pay tribute when it is due.

If there were no Minister of Town and Country Planning and consequently no Ministry, New Towns, with the exception of Letchworth and Welwyn Garden City, would be diagrams in books. The first new town plan was prepared by the Ministry. The initiative and drive to get things under way came from Beaufoy, an architect who was at that time an administrator charged with responsibility for the Greater London Plan. There can be few here who have knowledge of the difficulties encountered. But the plan was prepared and is now a matter of history. It was prepared by architects and engineers in the Ministry who had learned from Geddes, Abercrombie, Unwin and de Soissons; from Tony Garnier, le Corbusier, Telford and Mumford; from Héré, the Woods, the unknown architects of Edward I and Vitruvius. They listened to departmental lawyers, economists, administrators, engineers, and interested laymen. They consulted the County Architect, Director of Education, County Clerk, County Surveyor, and local surveyor. Aye, they even listened to the local people and the people of London. The plan was a thousand men deep before it was started. Another thousand contributed to its preparation. The new town will be built by many more thousands.

Professor Gordon Stephenson, B.Arch., F.R.I.B.A., A.M.T.P.I.

Standards were set at Stevenage and a technique was developed. The plan can be surpassed in a hundred ways. Principles of building and planning will change as our democracy develops. But the principles of the Stevenage Plan are those generally agreed at the moment. It is designed as a town where all men and women will find convenience and pleasure. Already there are eight other new towns under way: towns for miners and the people of congested London and Glasgow.

In housing and the building of new towns we are assuming our rightful role. In reconstruction of the old town centres we have much to do. Since the days of Wren we have not been asked to remodel and renew great areas of congestion. The German bombing, dramatic and sudden, cleared away hundreds of acres of mess and squalor in many towns. Architects established principles of reconstruction, and nowhere are they shown more clearly than in the County of London Plan. All over the world people examine this plan. Newcourt had dreamed of such a plan at the end of the seventeenth century. The great estates of the eighteenth century had shown what great landowners could do. The days of the great landowners have gone; the townspeople are to be the landowners to-day.

I want to conclude by suggesting there are many points on which we may all agree. But I shall limit myself to four and show them as problems of reconstruction. My first point is that we should be able to agree on architectural form. We shall be able to do this if we understand what Alberti meant when he talked about convenience. A convenient building is one which serves its purpose well, whether it be a cottage for an agricultural worker or a huge office block in a city. I believe we are achieving some success in the design of cottages. In 40 years we have made great advances. When it comes to larger buildings we often fail because we are imbued with curious "Renaissance" ideas about what they should look like. In official language we talk of "external appearance"; but I sometimes wonder if we know where this will lead us. In late Victorian times School Boards built tall pseudo-gothic structures to serve as schools; they were well built and no doubt their external appearance pleased. But nowadays we build schools for the convenience of teachers and their pupils, and we must agree they are better schools. There has been a revolutionary change. We have not begun to think of office buildings in the same way. Many Victorian office buildings, though dirty, are more convenient than some of those we build to-day. There were Victorian architects who thought of elementary principles of daylighting for the convenience of those working in the offices. In this city there are several buildings where architects of resource and ingenuity have overcome difficult site conditions. To-day the scientists have given us information which if used allows us to design light and spacious office buildings. We now

know that, even in the highest density central areas, buildings may receive adequate daylight in all rooms. If you examine the "Manual on the Redevelopment of Central Areas"* you will see set out a series of conclusions established by architects, scientists and engineers working in collaboration. Taking daylighting as a starting point, you will find that many other problems of central reconstruction can be solved if one thinks primarily in terms of convenience. We have established principles of convenience for school-children. You do not have to be a skilled economist to know it is essential to do so in factory building. Why not agree that office buildings should be designed primarily for convenience? If we do we shall also take a great forward step in the appearance of our towns, and introduce pleasure for the eyes, space and tranquillity.

My second point is that we should agree about structure. The simplest and most economical construction is nearly always the best. A Georgian house carried brick and timber construction to its logical conclusion on a domestic scale. To-day I see the massive steelwork going into some buildings to carry in turn massive masonry (often nowadays that decadent material, artificial stone, trying to simulate baroque masonry). The reasons for our economic difficulties are there before my eyes. We must return to first principles in building. Telford did this when he prepared his magnificent design for London Bridge. I want to see a power station or great office building with an elemental beauty of structure free of all vulgarity. I know what Lethaby meant when he said, "The only agreement that seems possible is agreement on a scientific basis, on an endeavour after perfect structural efficiency. If we could agree on this we need not trouble about beauty, for that would take care of itself."†

My third point is that we should agree about quality. I find nothing more depressing than the growing disregard for quality. And equally depressing is the filth and dirt in our cities and buildings which now seems to have eaten into everyday life. Arguments about labour and materials do not hold good when it comes to dirty, untidy cities. Geddes and Lethaby talked at length about this point. Cannot we urge that bombed sites should be turned into gardens as well as car parks, and in congested residential areas into children's playgrounds? It is of no use pretending to be horrified at juvenile delinquency if we tolerate squalor in our towns. Civic pride is not something to be gained by building imitation palaces with baroque façades. Civic pride begins with quality in workmanship, in clean streets and buildings in the ordinary decencies of life.

My fourth and final point is about people. To-day our role is clear. We have to do our most important work for and with the ordinary people of this land. It is always a pleasure for me to return from abroad, however exciting my journey has been, to be with my own people once again. I think we all have this feeling. We have to develop techniques of getting to know what people want and to the best of our ability give them an architecture which will meet their needs. It is too easy to assume that the architect is always right. He is only one man and his art is a "thousand men deep." It is an art which has developed through the centuries. It was once a folk art and then it became an affair for the connoisseur and speculative "pseudo-builder." Now architecture is returning to the people—and the architects. We have left our "Magic Mountain."

A vote of thanks was proposed by PROFESSOR LESLIE WILKINSON, and seconded by MR. R. GARDNER-MEDWIN.

* Ministry of Town and Country Planning *The Redevelopment of Central Areas, London*, 1947.

† W. R. Lethaby. *Architecture*. Revised edition, London, 1930, page 246.

Mr. A. Llewellyn Smith, M.B.E., B.A., F.R.I.B.A.

COMMUNITY CENTRES

THE SPECIAL CLAIMS OF YOUTH

THE importance of providing separate accommodation and facilities for youth organisations in addition to and not as integral parts of Community Centre projects was emphasised by Mr. A. Llewellyn Smith, M.B.E., F.R.I.B.A., when he spoke on "Community Centres" on the Saturday morning.

MR. LLEWELLYN SMITH began by recalling the origin of the community centre idea and said: The Community Centre was first conceived as an answer to certain social problems which arose in acute form on the extensive new housing estates developed by local authorities soon after the first World War. Societies and groups which came into being locally for social or educational purposes, or for recreation pure and simple, were continually hampered in their development by the absence of any place where they could meet. On each estate therefore such societies tended to get together and form Community Associations to demand buildings to serve their common needs. These movements were fostered, and in many cases initiated, by the National Council of Social Service; in this way the idea of a Community Centre was born.

The Community Centre was envisaged as a central institution providing accommodation and facilities for the common use of voluntary associations and groups on new estates, of a kind which each group would be likely to require, but which by reason of the lack of suitable existing premises and the high cost of building it could not hope to provide for itself. The fact that public funds were involved also made it necessary to ensure that there was no overlapping or over-provision, such as would inevitably occur if separate provision were made for the needs of each society. The facilities to be provided would obviously include a hall with stage and dressing-rooms, and a level floor for dancing; a large common room with a canteen; a gymnasium with changing accommodation and showers; games rooms; a reading-room; several smaller rooms for committee meetings and group activities; accommodation for hobbies and handicrafts; and the necessary administrative offices, lavatories and cloakrooms. There was also found to be a need for a small hall, intended chiefly to be let for wedding parties and social gatherings; while the provision of tennis courts, a bowling green, etc., in the grounds was obviously a great asset.

General Principles of Planning.

In planning, no two Community Centres are alike; nor is it right that they should be, if the layout is to be founded on local needs. General principles, however, would suggest that the main entrance hall should lead as directly as possible into a large welcoming common room, which, with the canteen opening off it, should be the focus of the plan. In principle the different groups should come together for social purposes and refreshments, but should then separate, each to its own special activity. The assembly hall may require a separate entrance, with its own cloakrooms and preferably either its own canteen or independent service from the general canteen. It should be so planned that it can be used independently of the rest of the centre. This also applies to the small hall, where provided, as this room will frequently be let for private parties. The various group and activity rooms should be so arranged that the group using each room can carry out its own activities with a minimum of interference from and disturbance to other users. Rooms intended for noisy activities, such as music, hobbies or physical recreation, should be kept apart from reading-rooms and committee-rooms; and so far as possible the windows of noisy and quiet rooms should not face one another. There should be ample accommodation for storage, and plenty of space for future expansion. The warden's office should be close to the common room and to the main entrance.

These considerations would seem to call for a loose informal arrangement, with a central core and several radiating wings, rather than for a tight symmetrical plan.

After describing a few notable Community Centres in existence to-day, the speaker went on: It has sometimes been argued that inasmuch as the community is based on the family, it is better that all members of the family, of whatever age or sex, should seek their recreation and social life together in one building, and that this will conduce to the growth of a strong community spirit. Nothing could be less true. Boys and girls at the adolescent stage are like fledglings, who need to spread their own wings away from the nest. They need to rebel, to assert themselves, to stand on their own feet, to be treated as individuals with desires and opinions of their own which command respect. They claim to be able to choose for themselves how they will spend their spare time. No single pattern of organisation can suit every individual; and there is generally no dearth of commercial and less desirable counter-attractions. In a healthy society a choice of youth organisations should be open to them, and in this country, though not, unfortunately, in all parts of it, a very considerable variety is available for them. There are boys' clubs, girls' clubs, twin clubs, and mixed youth clubs; Boy Scouts and Girl Guides; Boys' Brigades and the Girls' Life Brigade; the Y.M.C.A. and the Y.W.C.A.; the pre-Service units—Navy,

Army and Air Force—and looser-knit organisations such as the Youth Hostels Association. A youth club housed in a Community Centre, however well planned and well led, cannot by itself provide a substitute for this variety of choice. There is a real danger that some Local Education Authorities, subtly prompted by the desire to avoid overlapping, may come to consider the need for independent boys' and girls' club buildings, Scout headquarters and so forth as obsolete, and to believe that progress, no less than economy, demands that the whole provision for youth in future should be made within the general Community Centres or at least within the Municipal Youth Centres. If such a view prevails something very vital will be lost. Each type of youth organisation has its own special character, and each has particular merits not fully shared by the others. As an unrepentant believer in boys' clubs, I should be the first to admit that the Scouts, the Brigades and the Cadet Corps each have peculiar virtues of their own. Boys and girls are in the long run sound judges, and to gain and retain their allegiance youth organisations have continually to justify themselves and prove their worth. It would be lamentable if there were no competition, and young people were dragooned into the Community Centres and youth centres through the lack of any suitable alternative.

The general moral of this survey seems to be that the original conception of a Community Centre was a sound one, namely, that its real function is to foster and supplement rather than to dominate and supplant a variety of autonomous groups and societies. The acceptance of grants from the educational budget makes it necessary to plan the programme within the framework of the general scheme of further education, and to accept guidance and some measure of control from the Local Education Authority. Any attempt, however, on the part of that authority to impose a preconceived standard pattern, and to starve out groups and associations which did not in all respects conform, would involve a denial of democracy. Freedom of choice and freedom to manage one's own affairs are perhaps the most essential elements in voluntary education. No formal educational advantages can compensate for their loss.

The Community Centre's Task.

It should be the task of the Community Centre to stimulate and encourage the development of a network of independent youth clubs and organisations, in consultation with the local representatives of such bodies as the Boy Scouts' Association, the Young Farmers' Club or the National Association of Boys' Clubs. These organisations should wherever possible have their own premises outside the centre. The buildings should be adequate for their ordinary day-to-day programme, and should include a room suitable for physical activities, such as boxing and handball, etc., a changing-room, and showers. These are not luxuries but rock-bottom essentials. The Community Centre itself should provide supplementary facilities to be used by the organisations for special activities or on special occasions, such as, for instance, a full-size gymnasium, with complete set of apparatus, a first-class hall with stage, a properly equipped carpenter's shop or an art studio; and also where possible playing fields, a swimming-bath, and so forth. Youth organisations wishing to use these facilities should affiliate to the Community Association and claim a share in the time-table.

A policy on these lines would harness the energies and devotion of a large number of voluntary youth leaders, helping them to strengthen and improve their work, and would also encourage the growth of new youth groups, so bringing more boys and girls within the ambit of the youth service. Instead of antagonising existing youth organisations or gradually freezing them out, it would enlist their enthusiastic support for the purposes for which the Community Centre stands, and win for the centre a steady flow of young recruits who have already learnt through their organisations the elementary lessons of the community spirit.

When the scheme for County Colleges is revealed we may, of course, find that their functions with regard to voluntary youth organisations are intended to be similar to those which I have suggested should be exercised by Community Centres. Up to the present, however, we are in the dark, and some considerable time is bound to elapse before the County Colleges are in being. Meanwhile, plans for Community Centres are going ahead. According to the principles and methods adopted they can strengthen and sustain, or they can starve and possibly kill, the voluntary "Service of Youth" which alone can claim to be founded on many years of fruitful experience. Which is it to be? I suggest that there can be only one answer.

MR. R. A. H. LIVETT, proposing the vote of thanks, suggested that the Community Centre might be better visualised not as a single building but as a planned area with sites for voluntary organisations and certain community buildings, such as library, swimming baths and gymnasium, for general use.

MR. PETER SHEPHEARD, seconding, criticised the term "Community Centre," and thought that architects should be careful before launching such words; these were apt to take on meanings that were never intended.

Others who took part in the discussion were Mr. Edwin Williams (L.C.C.), Mr. Denis Winston (Southampton), Mr. J. Nelson Meredith (Bristol), Mr. G. Noel Hill (Lancashire), and Mr. Donald Bradshaw (Wirral).

R.I.B.A. PRIZES AND STUDENTSHIPS

COMPETITORS are reminded that it is the practice to illustrate a number of the drawings submitted in the competitions for the R.I.B.A. Prizes and Studentships. While there is no desire to restrict the freedom of competitors in any way, it is suggested that they should bear this fact in mind in considering the lay-out of their drawings in relation to the total area of paper allowed for any particular prize. Drawings which have been pasted together into one large sheet are difficult to reproduce satisfactorily; it is almost always essential to reproduce a large sheet in sections, and this generally means that the main title can only be reproduced in part on any given section.

Designs executed in faint pencil and wash are difficult to reproduce satisfactorily. If drawings are executed in pencil alone, they can be reproduced at some extra expense by a deep etched line block, but the use of a wash on pencil means that a tone block is necessary, and in a tone block the pencil work will tend to disappear.

It is not suggested that competitors should hamper themselves in drawing technique by adopting only those methods which give good reproduction. Contrast in rendered competition drawings, is, however, important.

PALACES OF HENRY III

EXCAVATIONS AT CLARENDON

AT a recent meeting of the Society of Antiquaries, MR. JOHN CHARLTON, M.A., F.S.A., read a paper on the palaces of Henry III, with special reference to Clarendon. Mr. Charlton has carried out extensive excavations on the site of Clarendon, which have brought to light considerable remains of the mediæval buildings, particularly those erected by Henry III.

The careful study of contemporary documents, such as the Liberate rolls, which contain details of the orders given to workmen and artists by the king, and of a few later records, has enabled Mr. Charlton to name with confidence the majority of the buildings (chapels and chambers as well as the king's hall), the remains of which he has uncovered. Not the least interesting of his finds is a large part of a kiln where tiles were made to pave the floors of chapels and rooms.

Founded at an uncertain but very early date as a hunting lodge, Clarendon was enlarged by King Henry II and some traces of his work have also been discovered; but the greater part was rebuilt or altered by Henry III, or later. Other apartments identified include two kitchens, the buttery, and the servants' quarters, as well as the chamber occupied by the king's knights.

Among works of art found are parts of several beautiful tiled pavements, and a remarkable carved stone head. The numerous paintings of which the old records tell us have, of course, been destroyed with the walls that they adorned.

Mr. Charlton was mainly confined to the documents in respect of other palaces, such as Gillingham, Havering, and Woodstock; but pointed out obvious resemblances between them which he thought allowed them to be placed in a group. He was, however, able to show a very interesting plan of Havering, the palace famous as a favoured residence of King Edward the Confessor.

Of the palace builders, Mr. Charlton mentioned in particular Master Elias, of Derham, who seemed to have been the chief person concerned with the building of a new chapel for the king, in the earlier part of his reign. Another was Master David, the king's carpenter, who appears to have been engaged at several of the king's residences, and Mr. Charlton remarked that such palaces would include numerous buildings of timber, in addition to those of stone. The records further mention large quantities of oak shingles for roofing.

There was also a well which, said Mr. Charlton, must have been an important one judged by the considerable sums spent on its maintenance and repair. Gardens and lawns are noted in the documents, and a wine cellar called *La Roche*.

Several of the king's chambers had names, such as the Antioch and Alexander's chambers, the names being derived from their painted decoration. In addition to pictures, an all-over pattern of gold stars on green was often used.

In concluding, Mr. Charlton said how very much his partner in the work at Clarendon, Dr. Tancred Borenius, and he were indebted to Mrs. Christie-Miller, the owner of Clarendon Park, for permission to excavate and for much encouragement and help, and to the Society of Antiquaries also for their keen interest and aid.

J. G. NOPPEN.

SOCIETIES AND INSTITUTIONS

R.I.B.A.

Membership.

On May 4 the following members were elected:—

As Fellows: W. Alp (London); W. G. L. Cheriton, O.B.E. (Romsey); E. A. Day (Totteridge); A. Douglas Jones, Dip.Arch. (Lvpl.) (Great Saling, Essex); H. S. Gardiner (Bracknell); R. T. Grummant (New Barnet); E. A. W. Ixer (Plymouth); J. A. R. McKee, A.M.T.P.I. (Belfast); S. H. J. Roth, J.P. (Chichester); S. H. Todd (Plumstead, Cape Town); J. H. R. Freeborn (Amersham); A. Wollenberg (London).

As Associates: B. C. Adams (Southsea); C. C. Adams (Mrs.) (London); F. C. Alford (Redcar); P. D. Anderton (Hull); E. J. Armitage, M.A. (Cantab) (London); P. T. Barefoot (London); K. W. Barns (London); L. W. Batho (Oxhey); D. W. Bell (Belfast); J. S. Birch (Lewes); C. Bowden (Stockport); R. A. Boxall (Salford); G. A. W. Brandreth (London); A. E. Brown (Blaby); R. C. W. Browning (London); K. D. Burbidge (Claygate); J. B. Carter (London); D. Cathels (Edinburgh); W. O. Churchill (Cambridge); B. Claridge (London); R. Clarke (Southport); G. R. Cleaver (Birmingham); K. L. Davies, A.R.I.C.S. (Derby); E. W. Davison (Blackrock, Co. Dublin); M. De Silva (Miss) (London); J. J. S. Dixon (Grimsby).

J. H. Elmer (London); R. G. Emsley (London); D. C. Evans (Miss), B.A. (London); D. N. Flatt, M.B.E. (Kenya); E. A. Fosbury (Farnham); I. G. Foster (Thornton Heath); H. R. Giddings (Penarth); W. Goodey (East Molesey); R. W. Graydon (Monkseaton); C. Grierson (Headington); G. R. E. Griffin (Sutton); G. H. Gurney, A.R.I.C.S. (Morden); M. Hackner, B.Arch. (Rand.) (Johannesburg); E. P. Hains (Exeter); H. S. Haines (London); J. C. M. Hames (London); A. E. Harvey (Oxford); W. J. Harvey (London); N. Havers, M.B.E. (Cardiff); K. H. Haworth (Holcombe Brook, nr. Bury); W. R. Headley (London); A. Hendrikz, B.Arch. (Rand.) (Johannesburg); D. J. Hill (Horndean); A. E. Hodnett (London); W. F. Holland (Kingston Seymour, nr. Clevedon); E. C. C. Hughes (Shortlands); H. G. Hughes (Belfast); W. Hughes (Cardiff); R. Hutchinson (Bristol).

C. D. Jack (Fairlie, Ayrshire); J. P. J. Jackson (Bromley); R. I. Jamison (Cape Town); B. R. Johnson (St. Margaret's Bay); D. K. Johnston (Miss) (Cottingham); F. E. Jones (London); C. W. Kempton (London); C. F. Kimm (London); K. L. J. Lacey (Norwich); F. H. Larbalestier (Edgware); R. A. Lambourn (Virginia Water); M. E. Lavender (Miss) (Sutton); S. G. Lawrence (London); M. H. Lister (Hull); J. M. D. Little (Richmond, Surrey); C. E. Lovegrove (Brighton); G. R. Lovell (Manchester); A. McDonald (Bristol); J. A. McRobbie (Innellan, Argyll); M. T. Mackay (Miss) (Campbeltown, Argyll); T. B. Main (Airdrie); D. H. Marriott (West Wickham); S. B. Marston (London); H. H. Martin (Dundee); J. A. Martin, D.C.M., Dip.Arch. (Edin.) (Edinburgh); J. L. Mather (Cleveleys); L. Mew (Taunton); M. Meyer, Dip. Arch. (Cape Town) (Bellville, South Africa); M. T. Mitchell (London); A. H. W. Mold (Hayes).

R. A. Orton (Chichester); T. Overbury (Jnr.) (Brimpsfield, nr. Gloucester); D. Parry-Evans (Birkenhead); S. J. Paterson (Ratho, Midlothian); W. A. Pegrum, T.D. (Purley); R. H. Pickles (Lightcliffe, nr. Halifax); T. J. Piercy (Captain) (Birmingham); A. S. B. Pimm (Solihull); S. M. Pitman (Miss) (London); G. R. Price (Bletchley); S. Price, B.Arch. (Rand) (Johannesburg); T. J. Priestley (Beverley); N. K. Purnell (Purley); K. J. Quinn (Dublin); B. N. Rahalkar (London); T. L. Rampton (London); K. F. Richardson (London); N. B. Ricketts (Hobart, Tasmania); L. S. Rider (New Malden); R. J. Roberton (Glasgow); D. J. Robinson (Sutton Coldfield); H. Schofield (Nottingham); D. O. Searle (London); C. Segal, B.Arch. (Rand) (Johannesburg); R. Silkstone (London); F. W. Smith, B.Arch. (Fiji); P. D. Smith (South Shields); G. H. Spencer (South Croydon); B. J. Tancock (London); B. C. Tapner (London); R. R. J. Tasker, M.B.E. (Chester); B. J. Tavener (Miss) (London); N. Taylor (Wakefield); A. C. Van Raat (London); B. G. Walker (Newcastle-upon-Tyne); J. S. J. Wall (Dublin); R. Walles (London); J. R. E. Wallis (Gravesend); W. M. Ward (Manchester); B. W. Watson (Johannesburg); A. Whitehead (Poulton-le-Fylde, Lancs); F. L. Whiteley (Blackpool); J. H. D. Wickham (Bideford); N. R. Wilkinson (High Wycombe); A. W. Williams (London); N. Woodbury (Withdean, Brighton); J. G. Woollatt, D.F.C., M.A.Cantab. (Nottingham); J. W. Worth (Leicester); L. A. Wright (Stoke-on-Trent); W. H. Wye (Chadwell Heath).

As Licentiates: J. B. Biscomb (Clifton, York); L. Erdi (London); G. C. Fox (London); W. A. Garth (Orpington); W. L. Gibbs (London); E. Goldfinger (London); M. Hutchinson (Oxshott); H. Machin (Wembley, Middx); W. H. Marmorek (London); H. S. Tong, A.R.I.C.S., A.M.T.P.I. (High Wycombe); R. V. Trigg (Northampton); P. E. Wood (Huddersfield).

ESSEX, CAMBS AND HERTS SOCIETY OF ARCHITECTS

Annual General Meeting.

THE annual general meeting, which was attended by some 80 members, was held at the R.I.B.A. on May 19. The following officers were elected for the coming year:—

President, Mr. R. C. Foster, M.B.E., M.C. (F); Hon. Sec., Mr. F. Evan-Jones (A); Hon. Treas., Mr. G. W. Dixon; Hon. Registrar, Mr. C. S. Jaques (A); Hon. Auditor, Mr. D. A. Wilkie (F). Representative on Allied Societies Conference, the President. Vice-Presidents (the chairmen of the six Chapters): Messrs. R. J. Sparrow (A) (Colchester); G. G. O'Neill (F) (Chelmsford); P. Bicknell (A) (Cambridge); D. F. Lumley (A) (Southend); D. A. Wilkie (F) (Hertfordshire); R. O. Foster (A) (West Essex).

The annual report and accounts were received and approved, all Chapters reporting a considerable increase both in membership and activities. It was resolved that a donation of £40 should be made to the Architects' Benevolent Society.

In his presidential address, MR. FOSTER discussed the difficulties facing architects in private practice at the present time, and suggested that Chapters could help by collecting information about the work which their members were doing, or were capable of doing, so that it might be possible to steer work in the direction of those who most needed it. He also made a plea that members should cease to argue about the respective merits of private or official practice and should all get together for the common good of the Society and of the R.I.B.A. After referring to the need for craftsmanship and quality in all architectural work, he spoke of the paramount importance of a reduction in costs throughout the building industry, and of the part which the architect must play in bringing this about.

The names and addresses of the secretaries of the Society and Chapters are as follows:—

ESSEX, CAMBRIDGE AND HERTFORDSHIRE SOCIETY, Mr. F. Evan-Jones (A), 42, St. Barnabas-road, E.17.

COLCHESTER CHAPTER, Mr. W. F. Harry (A), "Easton," Straight-road, Lexden, Colchester.

CHELMSFORD CHAPTER, Mr. S. E. Bragg (A), St. Fabian's-drive, Chelmsford.

CAMBRIDGE CHAPTER, Mr. W. E. Marston (A), 15, Chesterfield-road, Cambridge.

SOUTHEND CHAPTER, Mr. J. Malcolm Scott (A), 59, Woodfield-road, Leigh-on-Sea.

HERTFORDSHIRE CHAPTER, Mr. J. E. L. Caldwell (A), 83, High-street, Watford.

WEST ESSEX CHAPTER, Mr. S. J. Clapp, 8, Queen-street, E.C.4.

THE FACULTY OF ARCHITECTS AND SURVEYORS

Annual Conference at Eastbourne.

The first joint conference of the Faculty of Architects and Surveyors and the Faculty of Surveyors of England was held at the Grand Hotel, Eastbourne, from May 18 to 21. Conference sessions included the following lecture subjects: "Ancient Buildings and their Preservation," by Lieut.-Col. B. C. G. Shore, F.F.A.S., L.R.I.B.A.; "Aluminium in Architecture and Building," by Mr. H. W. Johnson, F.F.A.S., F.R.S.A.; "Plastics in Modern Interior Decoration," by Mr. H. H. Murray, P.F.A.S., P.F.S.(Eng.), and "The University and the Part-time Student," by Mr. S. G. Raybould, B.Sc.

OBITUARY

George Mackie Watson, F.R.I.B.A.

We regret to record the death of Mr. George Mackie Watson, F.R.I.B.A., F.S.A., at the age of 88. On leaving George Watson's College, he followed his elder brother into the office of Sir R. Rowand Anderson for his professional training. Then came a visit to Australia in 1885, where he executed commissions in Melbourne. He returned to Edinburgh to become Sir Rowand Anderson's principal assistant, and was engaged under him on such important works as the M'Ewan Hall and the National Portrait Gallery. He then started practice on his own account and, in addition to much domestic and estate work, he designed St. Serf's in Edinburgh and other churches, but his principal works were the restorations of Kirkwall Cathedral and of Eilean Donan Castle in Ross-shire.

John Kirkland, O.B.E., F.R.I.B.A.

The death has taken place of Mr. John Kirkland, F.R.I.B.A., at the age of 75. A native of Nottingham, he served his articles with the firm of T. C. Hine and Son, and was appointed architect to the Board of Control, retiring from the position 10 years ago. He was awarded the O.B.E. for his services.

T. R. Somerford, F.R.I.B.A.

We regret to record the death at Southfields, S.W., of Mr. Thomas Retford Somerford, F.R.I.B.A., of Messrs. E. A. Stone and Partners. He had been associated with Mr. Stone for 35 years, during which time he was engaged in work on the following buildings:—The Brixton Astoria, the Streatham Astoria, a block of offices and flats at Bond-street House, a sports pavilion at Ealing for Barclays Bank, a sports pavilion for the Civil Service, and several other Government buildings in London and the suburbs. He was also jointly associated with Mr. Bertie Crewe, F.R.I.B.A., in the design of the Piccadilly Theatre.

Frederic W. Lawrence, F.R.I.B.A.

We regret to record the death of Mr. Frederic William Lawrence, F.R.I.B.A., of Bournemouth. Mr. Lawrence had prepared plans for the rebuilding of the City Temple. He was 65.

HOUSES FOR SALE

MR. SLEEMAN'S PLEA

"If Mr. Bevan really wants to be canonised by the building industry within his own lifetime, as he is reported to have said he did the other day in Scarborough, he should allow some of us to build a few houses for sale." Mr. F. M. Sleeman, President of the National Federation of Building Trades Employers, said this at the half-yearly dinner of the Yorkshire Federation in Scarborough.

The need for houses is not confined to any one section of the community, said Mr. Sleeman, and with new houses being built at the rate of a quarter of a million a year, the needs of middle-class families cannot justly be ignored. Many middle-class families are living in extremely bad conditions. There are many families, consisting of two elderly persons or of invalids, who cannot afford the famine prices now being charged for existing houses and would buy, if they were allowed, small new houses at a reasonable price and leave the bigger houses for larger families.

Mr. Sleeman added that he still thought the present time inopportune for the setting up of a Working Party to inquire into building operations, but the decision having been taken the National Federation wished the Party well, and would co-operate with it. They were sure they could prove little wrong with an industry which, although harassed by shortages of materials and a surplus of controls, had done so well since the war that it had repeatedly been praised by Ministers. He did not see how such a body could increase materials still in short supply, but it could do something about controls.

He agreed there were too many employers in the industry, but this was still a democratic country. Competition was too severe for inefficient builders to survive for long, and it would be bad for the industry if every boy entering it could not feel that there was an employer's baton in his bag with his other tools.

BUILDING SOCIETIES ASSOCIATION

THE DESIRE FOR HOME OWNERSHIP

The desire for home ownership is greater than ever it was, said Mr. Andrew Stewart, C.A., F.C.I.S. (Huddersfield), in his address as chairman of the Building Societies Association at the annual meeting and conference at Edinburgh on May 26. This was evidenced, he declared, by the fact that 40 per cent. of the homes in the country were occupied by their owners, due in large measure to building society help. No one, said Mr. Stewart, could serve as chairman of the Association without realising that the true value of its work could never be assessed in terms of statistics, however imposing. It was their concern to think constantly in terms of the individual needs, and it was this personal aspect of their work that enabled the institutions to secure and retain the confidence of the public.

He went on to claim that building societies were at present the means of channelling from the spending power of the country savings at a rate of £200,000,000 a year, thus making a vital contribution towards combating the menace of inflation. The amount saved in building societies was, of course, limited by the amount they were able to lend, and if and when building of houses for sale was resumed the restrictions on the amount accepted on investments at present imposed by many societies might be relaxed.

Probably the most interesting and important feature of the year's statistics, said Mr. Stewart, was the increased volume of mortgage advances. He considered the dominating factor was the desire for security, in the knowledge that the ownership of a home was a bulwark against the fears and uncertainties of the future.

As the building society was intended to benefit both the investor and the borrower, there should be a fair balance struck between the interests of both. He urged that they should not forget their duty to their investors. They deserved proper consideration and encouragement, and any deliberate disregard of their interests would not only be wrong but would bring its own retribution.

IN PARLIAMENT

MINISTRY OF WORKS VOTE

On the Vote for the Ministry of Works in Committee of Supply in the House of Commons, Captain Cruickshank complained of the size of the staff of the Ministry. There was room, he said, for reducing control and licensing in present circumstances; automatically there would be a very great reduction in staff and expenditure. What was the reason for the continued existence of the Chief Scientific Adviser's Division, at a cost of £302,000, while the important Department of Scientific and Industrial Research still existed? It was not as if a great deal of research on building materials and the like did not occur outside Government circles altogether. He also inquired about the item described as the purchase of a site in Abingdon-street for additional building for the Houses of Parliament. What was the position in regard to it? He also touched on matters relating to Government buildings generally, bricks, cement and the supply of building materials.

Mr. Key, the Minister of Works, defended the expenditure of his department, which, he said, was largely the result of activities arising out of the war. They were not duplicating the work of the Department of Scientific and Industrial Research. That department dealt more particularly with the detailed scientific side of investigation; theirs at the Ministry of Works was more concerned with the practical application of the theoretical investigations that had been made, and also to them was left the sociological and economic research. For instance, they were doing a good deal of work, which was adding to the efficiency of the building industry, on the testing and development of new forms of building plant such as materials—handling machinery, excavators, scaffolds, jigs and things of that sort. It would be a good thing for members to see the Thatched Barn Experimental Station. One of the things for which great credit should be given in connection with the Thatched Barn was the investigation recently made into pre-stressed concrete. In that investigation they were going along lines which would mean a great saving in timber and steel, on such things as electricity transmission pylons. The work that was being done at the Thatched Barn was of enormous importance to the development of building in this country.

Because of the scarcity of certain essential materials and of the necessary trained building labour, it was felt that it would be a good thing to develop the prefabricated house. In the Vote there was included a considerable sum of money for development groups of permanent prefabricated houses which were being built for the Ministry of Works in a good number of areas. It was decided that some 50 houses of each selected type of prefabrication should be built in given local authority areas for the purpose of seeing what economies could be made in the methods of their construction. Some 18 development schemes of this kind had been carried out, in practically all cases with very good results—such good results, indeed, that local authorities had been only too glad to purchase the houses. There was also another scheme, which the Ministry was proposing to carry forward, for some 150 experimental houses to be constructed in groups of 10 in various parts of the country for the purpose of finding out what equipment and design of the general services would secure the best building conditions in low-cost houses for the general benefit of the working people of the country.

With regard to Houses of Parliament buildings, he referred to the specific case of the Abingdon-street site, and said that before plans were drawn for the increased accommodation for Parliament, which a select committee had decided should be erected in Abingdon-street, he would have an *ad hoc* Advisory Committee of Members of both Houses. Proposals and estimates would be placed before the House. Nos. 6 and 7, Abingdon-street would remain. There was no intention to build in Abingdon-street until the New House was completed and its facilities were known. The site had been bought because it was thought essential to have it should the need arise.

With regard to the control of building materials, it was well recognised during the war that controls would be absolutely essential if we were to get a distribution of resources which would lead to the construction of buildings, whether houses or other accommodation, in order of necessity; that was because of difficulties in particular areas or the urgency of particular services. No one wanted to maintain controls just for the sake of having them. They were only something which was desired in order to increase efficiency. He could assure the Committee that they would endeavour to remove controls as soon as removal became a possibility in the general interests of the community.

The building apprentices' training scheme was another achievement of which they could be proud. At present, 3,000 boys were employed. It was costing £300,000, but £100 per annum spent on the adequate and proper training of an artisan in the building industry was a profitable expenditure to the country. Already more than 2,500 boys had passed through the scheme, and gone into full apprenticeship or into work. The number of schemes was something like 120 for the country as a whole. In some cases local authority officials were acting as apprentice masters; in other cases firms were used for the job.

The production of cement had been to a remarkable level. In 1939 the production of cement in this country was about 8,250,000 tons. It fell in 1945 to just over 4,000,000 tons. This year the rate of production was 8,500,000 tons. They had, therefore, gone beyond the production rate of 1939. Their problem was the greater demand than they had in 1939. The way to solve it was that consumers should do their best to co-operate in order that the fullest use might be made of the resources.

Derequisitioning.

SIR H. LUCAS-TOOTH asked the Minister of Health whether it was his policy to permit the indefinite retention under requisition of dwelling-houses which were originally requisitioned from the owners when they were absent on war service and which such owners now required for their own occupation; and whether he would now issue an instruction that all such property was to be released to the owners after a definite period.

MR. BEVAN said that it is not possible to insist that all such houses or all such houses owned by Service men should be vacated within a specified time in view of the difficulty of finding alternative accommodation for existing occupiers. Every effort was made, however, to release houses from requisition for the personal occupation of the persons who owned them at the time of requisitioning, and 5,897 dwelling-houses and flats had been released from requisition by his department during the year ended April 30, 1948.

New North-West Kent Town.

MR. BRAMELL asked the Minister of Town and Country Planning when he anticipated that work would start on a new town to accommodate the surplus population of North-West Kent.

MR. SILKIN said he had not been able to find a virgin site to the south-east of London which satisfied all the requirements for a new town. He was now examining alternative possibilities of accommodating the surplus population of the overcrowded districts of north-west Kent by the expansion of existing communities.

CODE OF PRACTICE

ELECTRIC LIGHT IN DWELLINGS

THE Codes of Practice Committee has now issued, in final form, Code 324,101, "The Provision of Electric Lighting in Dwellings," prepared on its behalf by a committee convened by the Institution of Electrical Engineers. A draft of the code was published for general comment and submitted for comment to all professional and trade organisations concerned. All views expressed have been taken into consideration.

The provision of electric lighting in all types of dwellings is dealt with. There are also references to the lighting requirements of large houses, garages and greenhouses and to the modernisation of the lighting system in existing buildings. The code describes the basic requirements in light distribution, giving recommendations for the placing of light sources and prescribing the wattages of electric lamps for use in specific locations and the luminous efficiency desirable for lighting fittings. Minimum general lighting requirements for various types of rooms and supplementary facilities required to provide additional local illumination where necessary are set out in convenient form. The necessity of considering the influences upon lighting efficiency of such matters as interior decoration, deterioration of reflecting surfaces, walls and ceilings, and the ageing of light sources is emphasised. The code is mainly concerned with the installation of tungsten filament lamps, but in view of their growing importance, attention is also directed to the use of fluorescent lamps. Copies of the Code may be obtained from the British Standards Institution, 24-28, Victoria-street, S.W.1, price 2s., post free, reference CP. 324.101 (1948).

INCENTIVES FOR SMALL BUILDERS

A SUGGESTED METHOD

By E. G. Fish, A.C.A., A.C.W.A.

AS an accountant with experience of the building trade, I feel that in regard to the matter of incentives the small builder's point of view has not been adequately represented.

Several systems of incentive have been described in *The Builder*. Particularly I would refer to an article by Mr. F. Russon, F.I.O.B. (November 21 issue), and to the scheme operated by the L.C.C. (*The Builder*, April 9). Both these schemes are admirable for use by large- or medium-sized builders or on housing work. They do not, however, adequately cover the case of the small builder doing jobbing work, either on a cost plus profit basis or at fixed prices.

It is estimated that 80 per cent. of registered builders in this country employ less than ten men. A suitable incentive or profit-sharing scheme must be devised for these firms. The matter is urgent, for the industry has a great deal to lose if it fails to introduce incentives.

There appear to be two possible types of scheme. Either (1) labour is to be bonused on its own, or (2) labour and materials taken together are to be bonused.

Consider (1) above. If a builder estimates for a job on the basis of separate figures for labour and materials, the labour content can be used as a target against which the actual cost can be measured. A percentage of the saving can be paid to the operative. This system cannot apply on daywork jobs. Also it fails to take into account that, by the very reason of bonusing, additional waste of materials and plant may occur.

To overcome these difficulties, the following scheme is recommended. To its credit is its simplicity, its absence of booking and the ease with which the results can be put over to the operatives. It is appreciated that a profit-sharing scheme differs from an incentive scheme as such, in that it is only indirectly connected with output. On the other hand, it recognises factors that are otherwise ignored.

The scheme described depends for its smooth working on there being a continuity of work. It has been assumed that, say, 90 per cent. of jobs are begun and completed within a period of about four weeks.

The essentials are as follows:—

(1) A register must be kept of all accounts rendered to clients. (This may be a copy of a normal sales day book).

(2) The cost of each job, under the headings of labour, materials and other charges, must be measured against (1) above. This information will be extracted from the cost book or ledger.

(3) Accounts rendered less cost as (2) above equal gross profit.

(4) Gross profit less head office overheads equals contractors' net profit. Probably the easiest way to express overheads in this instance is as a fixed sum per week.

(5) The above figures should be recorded from week to week, and totalled monthly up to the last day in each month (alternatively, a four-week period may be used).

(6) A percentage of the monthly net profit (25 per cent. is used in the example) is paid to all operatives who at the end of the month in question have been continuously employed for not less than four weeks.

(7) Payments of shares of profit should be made by not later than the seventh of the month following the date of the last account rendered.

Conclusion.—It is realised that it is difficult to make any profit-sharing scheme perfect and entirely equitable as between employer and employed. However, what is abundantly clear is that either builders as a whole must get together *now* and produce a practical scheme, or for ever after the charge will be levelled that they had the opportunity but did not use it.

EXAMPLE OF INCENTIVE SCHEME FOR SMALL BUILDERS.

Month Ending January 31.

JOB NO.	NAME.	ACCOUNT RENDERED. Date.	Amount.	COST. Labour.	Material.	Other Expenses.	Total.	Gross Profit.
			£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
2715.	R. Jones & Co. ...	January 1	35 10 0	15 0 0	12 10 0	1 10 0	29 0 0	6 10 0
2718.	George, Ltd. ...	,, 2	17 1 6	14 1 0	—	—	14 1 0	3 0 6
		,, 3	—	—	—	—	—	—
		,, 7, etc.	—	—	—	—	—	—
			£950 10 0	351 0 0	391 0 0	33 0 0	775 0 0	175 10 0
Deduct— Overheads at rate of £30 per week for 4 weeks								120 0 0
								£55 10 0
Share of profits—25 per cent. of £55 10s. ... ... equals								£13 17 6

Distributed in accordance with wages paid per P.A.Y.E. for month of January.

	£ s. d.	Shares.
J. Brown, carpenter	23 10 0	47
R. Jones, bricklayer	23 14 0	47
R. George, bricklayer	24 6 0	48
T. Smith, labourer	19 7 6	38
T. Johnson, labourer	19 1 0	38
	£109 18 6	
Total shares (in completed 10s. of wage) ... ... equals		218

Per share = £13 17 6 / 218 = 1s. 3.3d.

Shares of Profit—J. Brown	47 x 1s. 3.3d.	£2 19 10
R. Jones	47 x 1s. 3.3d.	2 19 10
R. George	48 x 1s. 3.3d.	3 1 2
T. Smith	38 x 1s. 3.3d.	2 8 4
T. Johnson	38 x 1s. 3.3d.	2 8 4
		£13 17 6

CONCRETE FLOORS
FOR LINOLEUM FINISH

BY A CORRESPONDENT.

LINOLEUM should be a semi-permanent *finish* to floors, and not a temporary fitting.

It is not easy to get linoleum for domestic use to-day, but there is a supply for priority customers in Government offices, schools, hospitals and ships; the ideal is that in these buildings linoleum should be laid so that it will form part of the permanent floor, with no possibility of dry rot, cracks due to bad surfaces, or damp patches set up by moisture destroying adhesives.

The technical views of the trade on the question of the right floor surfaces for the job are of interest, and suggest a wider co-operation between builder, manufacturer, architect and linoleum layer.

There are two main requirements for a floor which is to be finished with linoleum: the floor must be free from dampness and the surface must be smooth and level. Continued dampness in a floor will cause deterioration of linoleum, but temporary dampness in a new concrete floor which has not had time to dry out presents no serious difficulty.

A concrete floor should have a top surface or screeding coat, not less than ¾ in. thick, composed of one part Portland cement to two parts clean screened sand. The surface should be trowelled smooth and level and finished off with a steel float. Expansion joints should be left in the floor at convenient centres and, after the concrete has set, should be filled level with the top surface. The floor should be handed over clean, dry and free from foreign matter.

Prevention of Dampness.

The common construction of concrete floors laid on the ground, i.e., bottoming, concrete and finishing, does not prevent dampness rising from wet soil below. This can be overcome by the introduction of layers of heavy bitumen sheeting. It should be noted, however, that if there is a considerable pressure of rising water the bitumen sheeting may be lifted in blisters unless there is at least 2 in. of concrete above to hold it down.

For suspended floors a damp-proof course must be provided between the bearer walls and the soffit of the concrete.

In fitting the linoleum floor finish, experienced floor layers can build a perfect finish on a bad sub-floor, but it should be remembered that this calls for skilled work and represents avoidable expense. Modern methods of fitting and cutting ensure a snug, tight fit at the seams and edges. Adhesives are available which provide a permanent bond to all types of sub-floors. Selected colourings and markings of linoleum are cut into strips and panels to build up appropriate floor designs when special effects are required.

Institute of Transport Officers.

The following have been elected by the council of the Institute of Transport to hold office for the year commencing October 1: President, D. R. Lamb; vice-presidents, R. Davidson, Sir Harold Hartley, K.C.V.O., C.B.E., V. A. M. Robertson, C.B.E., M.C., A. B. B. Valentine, J. S. Wills; hon. treasurer, S. Kennedy; hon. librarian, C. T. Brunner; hon. solicitors, Joynson-Hicks and Co.; past-presidents to serve on the council, R. Kelso, J. S. Nicholl, C.B.E., Sir Frederick Handley Page, C.B.E., R. Stuart Pilcher, C.B.E., F.R.S.E., T. W. Royle, C.V.O., M.B.E., Sir William Wood.

MORE VEHICLES OR BETTER ROADS?
TRANSPORT PRESIDENT'S WARNING

A WARNING that unless more new commercial vehicles were made available to the home market or the condition of the country's roads was improved the effect on the system of distribution for goods of all kinds would be disastrous, was given by COLONEL ARTHUR JERRETT, M.Inst.T., President of the Traders' Road Transport Association, in London on May 26. He was speaking at the second annual dinner of the Association, at which Mr. James Callaghan, M.P., Parliamentary Secretary, Ministry of Transport, was the principal guest.

Colonel Jerrett drew attention to the small number of new vehicles allowed for the home market, and said they were operating with vehicles that were old and tired. Moreover, they were operating on roads which were not in a fit state of repair to carry the vehicles. Either they must have new vehicles or roads in a better state of repair to carry the old rolling stock. He referred to the increase in the number of "C" licence-holders, and said the reason was clear. If one extended the premise that transport was an integral part of industry it followed that the present production drive must reflect an increase in number of vehicles required to carry the extra goods. Certain Government officers were of the opinion that those responsible for the conduct of business sat down and considered how nice it would be to have a fleet of their own vehicles running about the country. In point of fact, they were entirely influenced by economic needs.

MR. CALLAGHAN, suggesting means by which lower prices and increased spending power of money could be effected, said one way was for firms to examine their own levels of costs and see if they were running their businesses in the most efficient and economic way.

10th EDITION NOW READY

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By J. T. REA

This well-known standard work is now re-issued with an important new series of comparative tables of costs revised to October, 1947.

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(1) Increases in cost of Building Materials for years 1937, 1939, 1944, 1945 and 1946.
(2) Increases in Labour Rates and percentage increases for the above five years together with the Wages Increase and Bonus Incentive introduced in Oct. 1947.
(3) Average relative proportion of each trade to a complete building operation, with ratios of Labour to Material in each Trade and approximate percentage increases for the respective years, 1937-1946.
(4) Percentage Cost of Building Work as at 1914 compared with the years 1920-1946.
(5) Notes on the Acts and Regulations affecting the Control of Civil Building, War Damage Claims, etc.

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NEWS ITEMS

Change of Address.

The British Aluminium Co.'s Manchester branch office (north-western area) has been removed to 46, Fountain-street, Manchester 2. Tel.: Deansgate 3639.

M.A.F. Building Components Prices.

The Ministry of Agriculture and Fisheries, 55, Whitehall, S.W.1, have issued a list of the national prices for their building components. These prices will be revised occasionally. A list of the area stockists from whom components can be obtained direct appeared in *The Builder* of March 5.

No Extension of Import Licences.

The Timber Trades Federation has been informed by the Timber Controller that, in addition to import licences, which from time to time may be cancelled by refusal to extend their validity, no import licence, whatever the country of origin, will be extended beyond July 31.

Floating Power Station.

Broom and Wade, Ltd., manufacturers of air compressor and pneumatic tools, of High Wycombe, Bucks, give details of a floating compressed-air power station in the April edition of their news bulletin. This barge, which is equipped with two "Broomwade" portable diesel engine-driven sleeve-valve air compressors, is in use in Holland. Details are also given of "Broomwade" mining type air compressor plants, air compressors for diesel locomotive brakes, and the crankless air motor.

Timber Information Sheets.

The Timber Development Association has published two new information sheets. No. 33, "African Timbers," describes the characteristics of 22 species which were not incorporated where appropriate in the booklet, "Timbers of West Africa," but which will be embodied in a revised and enlarged edition. Certain East African timbers are included among these new names. The other sheet, No. 34, "Some New Timbers and Their Uses," catalogues over 100 timbers (with their country of origin, weight, colour and uses) which have been imported during the last year under the Hardwood Overseas Procurement Scheme, Part III. Copies may be obtained, free of charge, from the publicity manager, Timber Development Association, Ltd., 75, Cannon-street, E.C.4.

Fuel for Commercial Vehicles.

The British Road Federation, in a recent memorandum, expresses regret that it is proposed to reduce the fuel allocation of commercial vehicles by a further cut of 10 per cent., and that those who run private cars and receive supplementary allowances for commercial purposes will not benefit from the new concession of all-purpose petrol. It is inevitable, continues the memorandum, that those responsible for the distribution of supplies essential to the national life will find their task in the future more complicated as a result, and difficulty will be experienced in the summer months due to the general dispersal of the holiday population. The British Road Federation will therefore watch with considerable anxiety the problems which will arise and which are bound to affect the large number of industries they represent.

Death of Aluminium Pioneer.

SIR W. Murray Morrison, a pioneer of the aluminium industry in Great Britain, has died in London at the age of 74.

Quality Control.

The importance of quality control in modern methods of production cannot be too strongly emphasised. British Standard 600, "Application of statistical methods to industrial standardisation and quality control," published in 1935, became established as a classical work on this subject. This standard has now been reprinted and may be obtained from the British Standards Institution, 24, Victoria-street, London, S.W.1, price 12s. 6d., post free.

Fuel and the Future.

The proceedings of the "Fuel and the Future" Conference held by the Fuel and Efficiency Committee of the Ministry of Fuel and Power in London in October, 1946, have now been published by H.M. Stationery Office in three volumes. Vol. III, which is self-contained, is of particular interest to all who are concerned with the use of fuel in the home. It includes all the relevant parts of the opening and closing sessions of the conference, in addition to a wealth of information on the present position and future trends of domestic fuel usage. Section G deals with domestic heating requirements, new appliances and their influence on architectural design, and the effects and cost of structural insulation. The price of vols. I and II is 6s. net (6s. 6d. post free), and that of vol. III is 3s. 6d. net. (3s. 10d. post free), obtainable from H.M. Stationery Office.

Problems of the Painting Trade.

The seventh annual report of the Federation of Painting Contractors, Ltd., states that the Council adheres to the view that "the paint starvation" from which everything is to-day suffering and the consequent large numbers of crumbling fabrics evident on every hand calls for an immediate review based on a wider economic outlook. Had a broader and more generous allocation of paint and licences been forthcoming during the past two years, the immensity of the task now facing both the painting and building contractor would have been considerably reduced. The council are reluctant to venture on an estimate of the large capital value that has already been lost to the country in consequence of the absence of paint. The accumulated loss necessarily runs to a figure of many millions sterling, and the total replacement cost will, as time proceeds, eat deeply into the coffers of local authorities and also into any surplus money-box of the Exchequer. Some 164,000 of the labour force of the building industry and the painting trade are due over the coming months for transference to other so-called more essential industries and callings. This diversion will in itself go far to aggravate the existing state of affairs. Accustomed as all operatives are to the normal daily routine and practices of the trades making up the industry, any movement of labour from these fields seems destined to culminate in an irretrievable loss to an already dislocated industry with but little likelihood of appreciable gain in other industrial spheres. In company with many employer federations who have at heart the principles of free commercial enterprise and of personal action coupled with a proper sense of a trade's civic responsibilities, the council are of opinion that the time has arrived for an entirely new approach to be made by all authorities concerned with this pressing problem. They believe that the coming year holds little on which a full measure of optimism can be based. Generally speaking, there is no real shortage of paint, yet more and more skilled painters are being thrown out of employment in consequence of curtailment in the issue of licences. Moreover, incidental equipment and materials are obtainable in a sufficient quantity to merit a considerable increase in painting work being put in hand during the seasonal better days now upon us. The trade is able and prepared at once to make a start on the hardcore of the problem of repainting Great Britain.

Course in Timber Lectures.

A fortnightly course of 11 lectures at the College of Technology, Manchester, commencing October 20, will be sponsored by the Timber Development Association, Ltd. Following is the programme of lectures:—

October 20, "Structure and Composition of Wood," by B. Alwyn Jay; November 3, "Characteristics of Wood and Related Properties," by B. Alwyn Jay; November 17, "Wood in Relation to Elastic Theory," by Phillip O. Reece; December 1, "Statistical Theory"; December 15, "Selection and Grading of Timber," by F. D. Silvester; January 12, 1949, "Loads, Design and Stresses," by Phillip O. Reece; January 26, "Structural Design," by R. T. Walters; February 9, "Connections," by F. D. Silvester; February 23, "Plywood," by Phillip O. Reece; March 9, "Pests and Preservation," by B. Alwyn Jay; March 23, "Comparative Efficiency of Timber in Relation to Other Materials," by Phillip O. Reece.

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TRADE NEWS

Aluminium Data Sheet.

The Northern Aluminium Co., Ltd., Banbury, Oxfordshire, have published a second edition of the Noral data sheet, a summary of the properties of their current alloys, with general notes on aluminium.

Change of Address.

Messrs. Walter Lilley and Co., Ltd., building contractors, Orchard Works, St. Ann's-street, Westminster, S.W.1, have moved their purchasing office to their main works and stores at 6, South-side, Streatham Common, S.W.16. The company's joinery production department has also been reformed at Streatham works.

Precast Concrete Flue Blocks.

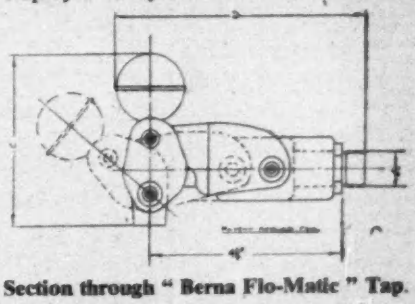
The Marley Tile Co., Ltd., have published a booklet dealing with Nautilus Precast Concrete Flue Blocks which they manufacture and distribute. It contains full information on the various types of blocks available, details of typical arrangements, and other data on erection and computation of quantities. Copies may be obtained on application to the firm.

Amalgamation of Companies.

Messrs. Ciba, Ltd., a Swiss company, have acquired a controlling interest in Aero Research, Ltd., Duxford, Cambridge, an organisation known for research work on synthetic resins and for the manufacture of industrial adhesives. The continuation of technological connections, which have existed between the two companies for a considerable time, is thus assured. It is understood that plans for the large-scale expansion of Aero Research, Ltd., have already been approved, and that both research facilities and production resources will continue to be developed under the managerial control of the company's full-time directors and shareholders, Dr. N. A. de Bruyne and Mr. R. F. G. Lea.

New Bib Tap.

Berna Engineering Co. have developed a bib tap on entirely new principles which will shortly appear on the home market. This is known as the "Berna Flo-Matic" tap, and employs a special high-pressure hydraulic seal which can be used for pressures ranging up to 3,000 lb. per sq. in. The seals are similar to those employed in hydraulic brakes on motor-



Section through "Berna Flo-Matic" Tap.

vehicles, or hydraulic controls on aircraft, and it is claimed that they will give approximately 65 years of wear on a domestic drip tap. The tap works on a gate principle, is fitted with a built-in anti-splash nozzle, and enables quick action without "hammering" the pipes. It has been designed in such a manner that the flow is operated by a pushing and pulling movement on the knob, and can be used for hot and cold water or other liquids. The retail price of the ½-in. bib tap will be 17s. 6d.

RATES OF WAGES IN THE BUILDING TRADE [AS FROM NOV. 16]

(Every endeavour is made to ensure accuracy, but we cannot be responsible for errors)

KEY TO SCHEDULE OF GRADE RATES.

Grade Classification.	A	A1	A2	A3
Craftsmen	2/9	2/8½	2/8	2/7½
Labourers	2/2½	2/2	2/1½	2/1½

Town.	Grade.
Aberavon	A
Aberdare	A
Abergavenny	A
Abingdon	A2
Accrington	A
Addlestone	A
Aldeburgh	A3
Aldershot District	A2
Alfreton U.D.	A
Alnwick	A1
Altrincham	A
Amble	A1
Amersham	A1
Amesbury	A
Andover	A2
Ardingly	A2
Arundel	A2
Ascot	A2
Ashby-de-la-Zouch U.D.	A
Ashby Woulds U.D.	A
Ashford (Kent)	A2
Ashford (Middlesex)	A
Ashington	A
Ashtead	A
Ashton-under-Lyne	A
Aspatria and Brayton	A2
Atherstone (parts of)	A1
Aylesbury	A2
Aylesby	A
Aylsham	A3
Bagshot	A2
Bakewell U.D.	A2
Banbury	A2
Barnard Castle U.D.	A1
Barnoldswick U.D.	A1
Barnsley	A
Barrow-in-Furness	A
Barrow-upon-Soar R.D. (exc. Thrussington A2)	A
Barry	A
Basford R.D. (exc. Willoughby-on-the-Wolds A2)	A
Basingstoke	A2
Bath	A
Batley	A
Baxterley	A1
Beaconsfield & District	A1
Beamish	A
Bearl	A
Bearpark	A
Beccles	A3
Bedale R.D.	A
Bedford	A
Bedlington	A
Bedwas	A
Beeston & Stapleford U.D.	A
Belper U.D.	A
Belton	A
Berkhamsted	A1
Berrington	A1
Berwick District	A1
Beverley	A
Bexhill-on-Sea	A2
Biggleswade	A2
Billericay	A1
Billing	A
Billingham U.D.	A
Bilsthorpe	A
Bishington	A2
Birkenhead	*
Birmingham C.B.	†A
Bishop Auckland	A
Bishop's Stortford	A1
Bispham	A
Blackburn	A
Blackpool	A
Blackwell R.D.	A
Blaydon U.D.	A
Bletchley	A
Blyth	A
Bognor Regis	A2
Boldon U.D.	A
Bolsover U.D.	A
Bolton	A
Bourne End	A1
Bournemouth District	A1
Bracknell	A2
Bradford	A
Bradford-on-Avon	A2
Braintree	A2
Breconshire, County of	‡A3
Brent Knoll	A2
Brentwood	A
Bridlington	A
Brierfield	A
Brighouse	A
Brighton	A1
Bristol	A
Broadstairs	A2
Bromsgrove U.D.	A
Brough	A
Broughton (Cheshire)	A
Buckley	A
Bungay	A3
Burnham-on-Crouch	A3
Burnley	A
Burton-on-Trent C.B.	A
Bury	A
Bury St. Edmunds	A3
Buxton	A1
Byfleet	A1
Calder Valley	A
Cambridge	A
Cannock U.D.	A
Canterbury	A2
Cardiff	A
Cardiganshire, County of	‡A3
Carlisle	A
Carmarthenshire, Cnty. of	‡A3
Carnarvonshire, Cnty. of	‡A3
Carnforth	A
Castleford	A
Caterham	A
Chapel-en-le-Frith	A1
Charmy Down	A
Chatham & District	A1
Cheadle (Staffs.) R.D.	A
Chelmsford	A
Cheltenham	A1
Chepstow	A1
Chertsey	A
Chester	A
Chesterfield M.B.	A
Chesterfield R.D.	A
Chester-le-Street U.D.	A
Chichester	A2
Chippenham (inc. Chippenham Within and Hardenhuish)	A2
Chorley	A
Clacton	A1
Cleethorpes	A
Clevedon	A1
Cleveleys	A
Clitheroe	A
Coalville U.D.	A
Cobham (Surrey)	A
Colchester	A
Colne	A
Colwyn Bay	A1
Congleton	A1
Consett	A
Conway	A1
Cornwall, County of	‡A2
Coventry C.B.	A
Cranbrook	A2
Cranleigh	A2
Crawley (Sussex)	A2
Crewe	A
Cromer	A1
Crowborough	A2
Cuckfield	A2
Dalton-in-Furness	A
Darlington District	A
Darwen	A
Deal	A2
Denbigh Town	A2
Derby C.B.	A
Devizes	A2
Devon, County of	‡A2
Dewsbury	A
Didcot	A2
Diss	A3
Doncaster C.B.	A
Dorking	A1
Dorset, County of (excepting Poole and Wimborne A1)	A2
Dover	A2
Dovercourt	A1
Driffield U.D.	A1
Droitwich M.B.	A1
Dudley M.B.	A
Dunstable	A
Durham City	A
Eastbourne	A1
E. Glam. & Mon. Val.	A
East Grinstead District	A2
Eastwood (Notts.) U.D.	A
Ebbw Vale & District	A
Edenbridge	A2
Ely	A3
Epping	A
Exeter	A1
Fakenham	A3
Falmouth	A2
Fareham	A
Faversham	A2
Felixstowe	A1
Filey U.D.	A1
Fleetwood	A
Flint	A
Folkestone	A2
Frinton	A1
Frome	A1
Gainsborough R.D. (Mid. pt.)	A2
Gateshead	A
Gillingham (Kent)	A1
Glossop	A
Gloucester	A1
Gloucestershire, Cnty. of	‡A2
Godalming	A2
Goole M.B.	A
Gosport	A
Grantham M.B.	A1
Gravesend	A
Great Yarmouth	A1
Grimsby (Yorks.)	A
Grimsby R.D. (Lincs.)	A3
Guildford District	A2
Guilsborough	A1
Guiseley	A
Halesowen M.B.	A
Halifax	A
Halstead	A2
Haresfield	A1
Harlow	A1
Harpenden	A1
Harrogate	A
Hartlepools	A
Harwich	A1
Haslemere	A2
Hastings	A2
Hatfield (Herts.)	A
Haywards Heath	A2
Hemel Hempstead	A1
Henley-on-Thames	A2
Hereford	A2
Herefordshire, Cnty. of	‡A2
Herne Bay	A2
Hertford	A
Hexham	A
Heysham	A
High Wycombe	A1
Highworth	A2
Hinckley U.D.	A
Hitchin	A1
Hoddesdon	A
Horley	A2
Horsham	A2
Horwich	A
Huddersfield	A
Hull	A
Hunstanton	A2
Huntingdon (Staffs.)	A
Ilkley	A
Ingatestone	A1
Ipswich	A
Isle of Sheppey	A2
Isle of Thanet	A2
Isle of Wight	A3
Jarrow B.	A
Keighley	A
Kendal	A
Kenilworth U.D.	A
Kettering M.B.	A
Keynsham	A
Kidderminster M.B.	A
King's Lynn	A2
Kingskerswell	A1
Kingsteignton	A1
Kirkham	A
Knaresborough U.D.	A
Knowle	A1
Lancaster	A
Leamington M.B.	A
Leatherhead	A
Leeds	A
Leicester C.B.	A
Leighton Buzzard	A2
Letchworth	A1
Lewes	A2
Lichfield M.B.	A1
Lincoln C.B.	A
Littlehampton	A2
Liverpool	*
Llandudno	A1
Llanelly	A
London	*
Long Eaton	A
Loughborough M.B.	A
Louth M.B.	A2
Lowestoft	A1
Loxton	A2
Luton	A
Lyncham (Devon)	A1
Macclesfield	A1
Maidenhead	A1
Maidstone	A1
Maltby	A
Maldon (Essex)	A2
Malvern U.D.	A2
Manchester	A
Manningtree	A1
Mansfield M.B.	A
March	A2
Margate	A2
Market Harborough	A1
Maryport	A
Matlock U.D.	A1
Melksham	A2
Melton Constable	A3
Melton Mowbray U.D.	A2
Merthyr	A
Middlesbrough	A
Middleton	A
Middlewich	A1
Milford Haven	A2
Morecambe	A
Morley	A
Mundesley	A2
Nantwich	A1
Nelson	A
Newark-on-Trent R.D.	A1
Newbury	A2
Newcastle-on-Tyne	A
Newcastle-under-Lyme	A
New Forest District	A2
Newmarket	A2
Newport, Mon	A
Newport Pagnell	A2
Newton Abbot	A1
Northallerton Dist.	A
Northampton C.B.	A
North Shields	A
Norton Radstock	A1
Norwich	A
Nottingham C.B.	A
Nuneaton M.B.	A
Oakham U.D.	A2
Oldham	A
Ongar	A
Ormskirk	A
Ossett and Horbury	A
Oxford	A
Oxted	A1
Paignton	A1
Peterborough	A
" Soke	A1
Pickering	A3
Plymouth	A
Pontefract	A
Pontypridd District	A
Portishead	A
Portland Stoneyards	A
Portsmouth	A
Port Talbot	A
Preston	A
Pudsey	A
Pulborough	A2
Radnorshire, County of	‡A3
Ramsgate	A2
Rayleigh	A1
Reading	A
Redcar B.	A
Redditch U.D.	A
Redhill and Reigate	A
Ripon	A3
Rochdale	A
Rochester	A1
Rotherham	A
Rugby M.B.	A
Saffron Walden	A2
St. Albans	A
St. Helens	A
St. Neots	A2
Salisbury City	A2
Salisbury Plain	A2
Sawbridgeworth	A1
Saxmundham	A3
Scarborough	A
Scunthorpe	A
Selby	A
Sevenoaks	A1
Sheerness	A2
Sheffield	A
Shipley	A
Shoeburyness	A
Shoreham	A1
Shrewsbury M.B.	A
Sittingbourne	A2
Skegness U.D.	A1
Skipton U.D.	A1
Sleaford U.D.	A3
Slough	A1
Smethwick C.B.	†A
Snettisham	A2
Somerset, County of	‡A2
Southampton	A
Southend-on-Sea Dist.	A
Southport	A
South Shields C.B.	A
Spalding U.D.	A2
Stafford M.B.	A
Staines	A
Stamford M.B.	A1
Stantonwick	A
Stevenage	A1
Stockport	A
Stockton R.D.	A
Stockton-on-Tees	A
Stoke-on-Trent C.B.	A
Stoke Orchard	A1
Stourbridge M.B.	A
Stourport U.D.	A
Stowmarket	A3
Stratford-on-Avon M.B.	A1
Sunderland District	A
Sunningdale	A
Sutton Coldfield M.B.	A
Swaffham	A3
Swanage	A2
Swansea	A
Swindon	A2
Swinton U.D.	A
Tamworth M.B.	A
Tenterden	A2
Tewkesbury	A1
Thames Haven	A
Thetford	A3
Thorpe Bay	A1
Thurrock U.D.C. Area	A
" North of, to Billericay	A1
Tilbury	A
Todmorden	A
Tonbridge	A1
Torquay	A1
Totnes	A1
Trowbridge	A2
Tunbridge Wells	A1
Tynemouth C.B.	A
Uppingham (Salop)	A1
Uttoxeter U.D.	A2
Wakefield	A
Wallsend B.	A
Walsall C.B.	A
Walsden	A
Walton-on-Naze	A1
Ware	A
Warminster	A2
Warrington	A
Warwick M.B.	A
Wellington R.D.	A1
Wells (Norfolk)	A3
Welwyn	A
Welwyn Gar. City	A
West Bromwich C.B.	A
Westbury	A2
Westcliff-on-Sea	A
Westerham	A1
Weston-super-Mare	A1
Weybridge	A
Weymouth	A2
Whitby U.D.	A1
Whitstable and District	A2
Wickford	A1
Widnes	A
Wigan	A
Wigton	A3
Willington	A
Wilmslow	A
Wilts, County of	‡A2
Winchester	A2
Windermere	A3
Windsor and Eton	A1
Wisbech	A2
Witham	A2
Woking (District)	A1
Wokingham	A2
Wolverhampton C.B.	A
Woodbridge	A3
Worcester C.B.	A
Workington	A
Worksop M.B.	A
Worthing	A2
Wrexham (incl. Cefn)	A
Wroughton	A2
Wylam	A
Wymondham	A3
York	A

* For Birkenhead, Liverpool, and London the rates are :—Craftsmen, 2s. 10½d.; Labourers, 2s 3½d. In the case of London the rate beyond the 12-mile radius is :—Craftsmen, 2s. 10d.; Labourers, 2s. 3½d.

† Plus 2d. per working day.

‡ This is the County rate and applies except where higher grades are stated.

NOTE.—Carpenters, Joiners and Plumbers in all towns and districts receive 2d. per day Tool Allowances.

WOMEN'S RATES.—In all districts throughout the country the rate of wages for women engaged in craft processes is 1s. 11d. per hour. Women introduced to carry out work other than craft processes, 1s. 7d. per hour. (Change to date from beginning of pay week following December 7, 1947.)

For Building Trade Wages in Scotland, see page 688

PRICES CURRENT OF MATERIALS*

NOTE.—These prices apply to large quantities of materials at works at London stations, or site, in London area as stated. Prices for smaller quantities ex merchant's warehouse will of course be higher. Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry. The prices of soft woods are for cash on delivery.

BRICKS, &c.

	£ s. d.
First Hard Stocks	8 15 0
Second Hard Stocks	8 0 0
Mild Stocks	6 10 0

All loaded free into lorry at the works. The question of haulage is still very difficult and prices must be obtained from job to job.

2½ in. Phorpres. A discount of 6d. 1,000 only monthly account.	Certain London L.M.S. Stations per 1,000. s. d.	Sites in P.B.M.A. Area N. of Thames per 1,000. s. d.
Pressed	73 0	88 0
Keyed	75 0	90 0
Single Bullnose	93 0	108 0
Rustics	93 0	108 0
Whites	93 0	108 0

	£ s. d.
Best blue Pressed Staffs. (London Stns.) ..	18 9 0
Do. Bullnose (London Stns.)	19 2 0
Blue Wire Cuts (London Stns.)	16 7 6

Best Stourbridge Fire Brick (London Stns.) :—

£ s. d.		£ s. d.
2½ in. .. 16 18 6	3 in. ..	19 16 0

GLAZED BRICKS (London Stns.). The prices given below are now subject to a percentage addition of 22½.

Best White Ivory and Salt Glazed Stretcher	40	0	0	D'ble Stretchers	53 10 0
				D'ble Headers	48 10 0
				One side & two ends	54 10 0
Headers	39	10	0	Two sides & one end	56 0 0
Quoins, Bullnose & 4½ in. Flats	50	0	0	Splays and Squints ..	52 0 0

Second Quality, £2 0s. per 1,000 less than best. Cream and buff, £2 0s. extra over white. Other colours. Hard Glaze, £5 10s. 0d. extra over white.

Haulage to site 20s. 1,000.

PARTITION SLABS.

Delivered London Area.
12 miles radius Charing Cross.

HOLLOW CLAY PARTITION BLOCKS.
London Brick Company.

Minimum Lorry Loads. Keyed.	s. d.
2" per yd sup. 120 yds.	3 1
2½" " " 100 "	3 4
3" " " 100 "	4 0
4" " " 84 "	4 7

Half blocks *add* 2s. per yard super to above prices

CLINKER CONCRETE.

2" per yd. sup.	2 8	3" per yd. sup.	4 0
2½" " "	3 4	4" " "	5 3

CRANHAM TERRA COTTA.

Size 12 x 9 x 2" per yd. super	3 1
Size 12 x 9 x 2½" " "	3 4
Size 12 x 9 x 3" " "	4 0
Size 12 x 9 x 4" " "	4 7

HEMPSTEAD—KEYED TWO SIDES.

12 x 9 x 2"	3 1	12 x 9 x 3"	4 0
12 x 9 x 2½" ..	3 4	12 x 9 x 4"	4 7

Per yard super d/d. Free on site, London.
Plus 2d. for smooth one side, and 4d. for smooth both sides.

STONE.

	s. d.
BATH STONE—	
Monks Park	5 4
St. Aldhelm Box Ground	5 10
Delivered in railway trucks at South Lambeth, G.W.R., per ft. cube.	
PORTLAND STONE—	
Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, S. Rly. .... per ft. cube	6 1½
NOTE.—1d. per ft. cube extra for every ft. over 20 ft. *average* and ¼d. beyond 30 ft.	
HOPTON-WOOD STONE—	
F.O.R. Quarries, Wirksworth, Derbyshire.	
Random blocks up to 3 ft. 3 in. long and not over 10 cu. ft. .... per ft. cube	22 6
Slabs—Random sizes sawn 2 sides, up to 5 ft. long and not over 15 ft. super. ¾ in. per ft. super	4 7
YORK STONE, BLUE—*Robin Hood Quality.*	
Delivered at any Goods Station, London.	
6 in. sawn two sides landings to sizes (under 30 ft. super) .. .. per ft. super	9 4
6 in. rubbed two sides, ditto "	10 10
3 in. sawn two sides slabs (random sizes) .. .. "	4 5
2 in. to 2½ in. sawn one side slabs (random sizes) (paving) .. "	2 4
1½ in. to 2 in. ditto .. .. "	2 1½
HARD YORK—	
Delivered at any Goods Station, London	
Scrappled random blocks per ft. cube	13 4
6 in. sawn two sides landings to sizes (under 40 ft. super) .. .. per ft. super	10 0
6 in. rubbed two sides, ditto	11 10
4 in. sawn two sides slabs (random sizes)	6 5
3 in. ditto ditto .. "	4 10
2 in. self-faced random flags per yd. super	19 9

CEMENT.

	£ s. d.
Best British Portland Cement. Standard Specification delivered London area.	
6-ton loads and upwards site..... per ton	3 0 6
1- to 6-tons site	3 3 6
In non-returnable paper bags charged at 11/- net per ton or 6d. each net per sack in lots of less than 1 ton.	
In non-returnable jute sacks charged at 9/- per ton.	
In returnable jute sacks charged at the rate of 35/6 net per ton of cement of 1/9½ net per sack in lots of less than 1 ton. Credit on return at 1/6 net per sack.	
In returnable cotton sacks charged at the rate of 3/4 net each sack. Credit on return at 3/- net each sack.	
"Ferrocrete" Rapid Hardening Cement:	
6-ton loads and upwards site.....	3 6 6
1- to 6-tons site	3 9 6
In paper bags 11s. per ton extra.	
"Aquacrete" Water Repellent cement, 31/6 per ton on ordinary "Blue Circle" prices. In paper bags 9s. per ton extra.	
Red, Buff or Khaki "Colorcrete" in 6-ton lots	5 2 0
In paper bags 9s. per ton extra.	
Other colours, according to colour. In 4-ton lots from 173/- to 397/- per ton (including paper bags).	
"Snowcrete" White Portland Cement (in free paper bags)	11 14 0
Under one ton ..... per cwt.	0 13 11
"417" Cement (Ultra Rapid Hardening) Delivered Site London Area in 6-ton lots and upwards	4 2 0
In paper bags 9s. per ton extra	
Super Cement (Waterproof), bags extra..	4 12 0
Cullamix Tyrolean Finish.....£7 15 6 to	9 9 0
(1-ton lots and upwards, including cost of Paper Bags)	

£ s. d.		£ s. d.
Parian Cement 7 10 6	Keen's Cement, White	8 1 6
	" Pink	7 15 9

PLASTER.

£ s. d.		£ s. d.
Coarse, Pink 4 15 3	Sirapite, Coarse..	4 16 3
" White 5 4 9	" " Finish ..	5 4 3

Above prices for 1-ton loads and over London Area.

Blue Lias Lime, inc. bags, 6-ton lots	5 17 6	Hydrated Lime, 6-ton lots	4 1 6
Granite Chips, 6-ton lots ..	2 5 0	Lump Lime, 6-ton lots.....	3 15 3
		Hair, per cwt...	4 4 6

Stourbridge Fireclay in paper bags £4 2s. 0d., 6-ton lots at railway depot.

SAND.

D/D site in full lorry loads. Average of prices for Boroughs of Westminster, Paddington, Holborn and St. Pancras.

Thames Ballast	15s.	9d. per yd.
Pit Ballast	15s.	10d. "
Pit Sand	15s.	2d. "
Washed Sand	17s.	0d. "
¾ in. shingle	15s.	2d. "
¾ in. Broken Brick	17s.	6d. "
Pan Breeze	10s.	4d. "

TILES.

Delivered at London rate stations in full truck loads of not less than 6 tons ..... Per 1,000 f.o.r. London.

	£ s. d.
Best machine-made tiles from Broseley or Staffordshire districts	£9 14 6
Ditto hand-made ditto	11 11 0
Ornamental ditto	12 4 0
Hip and valley tiles—Hand-made.....	19 5
(per dozen) —Machine-made	18 4

NOTE.—Breakage in transit, purchasers' responsibility.

SLATES.

First quality slates from Penrhyn or Portmadoc, carriage paid in full truck loads to London Rate Station.

Per 1,000 actual	£ s. d.		£ s. d.
24 by 12	67 14 0	18 by 10	34 13 0
22 by 12	59 2 0	18 by 9	31 2 0
22 by 11	53 6 6	16 by 10	30 10 0
20 by 12	46 10 0	16 by 8	23 16 0
20 by 10	44 12 6		

NOTE: Breakage in transit, purchasers' responsibility.

PLUMBERS' BRASS WORK.

Delivered in London.
M.O.H.

S.D. BIBCOCKS CRUTCH HEAD, FOR IRON.
½ in. 66/- ¾ in. 108/- per doz.
TOILET BIB COCKS FOR IRON.
½ in. 114/- ¾ in. 171/- per doz.
S.D. STOP COCKS FOR IRON.

¼ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
72/-	111/-	189/-	269/-	363/-	590/- per doz.

S.D.S. COCKS WITH TWO UNIONS FOR LEAD.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
102/-	164/-	264/6	369/-	438/-	736/- per doz.

DOUBLE NUT BOILER SCREWS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
17/-	20/-	33/-	68/-	108/-	140/- per doz.

HEAVY CROYDON BALL VALVES.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	
93/-	149/-	185/-	371/-	500/-	per doz.

CAPS AND SCREWS.

1¼ in.	1½ in.	2 in.	3 in.	3½ in.	4 in.	
23/6	26/6	45/-	68/-	89/-	112/-	per doz.

BRASS SLEEVES.

1½ in.	2 in.	3 in.	3½ in.	4 in.	
29/-	31/-	67/-	83/-	101/-	per doz.

LEAD TRAPS WITH BRASS CLEANING SCREWS.

	1½ x 6 lb.	1½ x 6 lb.	2 x 7 lb.	3 x 7 lb.	
Lead P. 57/-		69/-	121/-	144/-	per doz.
Lead S. 69/-		84/-	138/-	153/-	per doz.

SOLDER.—Plumbers', 3/1, Tinmen's 3/11, Blow pipe, 4/- per lb.

Copper Tubes.....1/9½ per lb. Basis.
Brass Tubes.....1/9½ per lb. Basis.
Basis prices are subject to extras.

PAINTS, &c.

		£ s. d.
Raw Linseed Oil (5 galls.)....	per gallon	1 3 3
Boiled Linseed Oil (5 galls.)	"	1 3 7
Genuine White Lead (free kegs) ..	cwt.	7 7 0
Genuine White Lead Paint (tins free)	gall.	2 12 0
Genuine Red Lead	cwt.	6 12 6
Putty (free packages).....	cwt.	3 2 6
Size XD quality.....	fkn.	0 9 0

Turpentine substitute can be obtained and prices vary according to quality from 3/8 gallon upwards.

VARNISHES, &c.

		Per gallon
Oak Varnish	Outside	1 6 0
Fine do.	"	1 16 0
Fine Copal	"	1 15 0
Pale Copal	"	1 12 8
Floor Varnish	Inside	1 10 0
Fine Pale Paper	"	2 1 0
Hard Drying Oak	"	1 10 0
Fine Hard Drying Oak	"	1 12 0
Fine Copal Varnish	"	1 13 6
Best do.	"	1 16 0
Best Japan Gold Size	"	1 15 0
Best Black Japan.....	"	1 8 6
Brunswick Black		1 4 6
Berlin Black		1 8 6
Knotting (patent)		1 12 6
French and Brush Polish		1 18 6
Liquid Dryers in Terebene		1 8 6

GLUE.

Best Scotch Glue.....per ½ cwt.		4 14 6
Croid Glue ..... per lb.		2 9

* The information given on these pages has been specially compiled for THE BUILDER, and is copyright. The aim in this list is to give, as far as possible, the *average* prices of materials, not necessarily the highest or lowest. Quality and quantity obviously affect prices—a fact which should be remembered by those who make use of this information. Prices are subject to 2½ per cent. cash discount.

PRICES CURRENT OF MATERIALS—(cont'd.)

See Note at top of preceding page.

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION, PER TON—

R. S. Joists, cut and fitted	£30 7 6
Plain Compound Girders	34 17 6
" Stanchions	42 7 6
In Roof Work	52 17 6

NOTE.—These prices are for standard pieces and not special pieces of an awkward nature.

MILD STEEL ROUNDS.—To London Stations, per ton.

Diameter.	£ s. d.	Diameter.	£ s. d.
¼ in.	26 17 6	¼ in.	24 12 6
⅜ in.	26 2 6	⅜ in. to 2¾ in.	23 17 6
½ in.	25 7 6		

WROUGHT TUBES AND FITTINGS.
Deliveries from works.
Deliveries from London stock further 2½% gross.

	Tubes. ½"/6"	Tubulars. ½"/6"	10/17 and 19/24	Flanges. ¼"/2"	Flanges. 2½"/6"
	%	%	%	%	%
Light weight	49½	—	45½	49	52½
Heavy weight	42	42	37½	39	47½
Galv. lightweight	28	—	28	28	28
Galv. heavyweight	18	18	18	18	18

Tubes and tubulars sizes ¼"/⅜" inclusive, charged extra of 5% less gross.
Fittings. Figs. 25/34 5% less gross discount.
Terms.—Net cash end of month following date of invoice. Carriage paid on lots of £10 nett value and over.

C.I. HALF-ROUND GUTTERS.—London Works, per yd. in 6 ft. lengths. Prices ex Stop ends.

	Gutters.	Nozzles.	
3 in.	2/5	2/2	7d.
3½ in.	2/8	2/5	7d.
4 in.	2/10	2/7	1/–
4½ in.	3/1	3/–	1/2
5 in.	3/5	3/3	1/3
O.G. GUTTERS			
3 in.	3/1	2/10	9d.
3½ in.	3/7	2/10	1/–
4 in.	3/7	3/–	1/2
4½ in.	3/8	3/5	1/3
5 in.	4/6	4/–	1/5

RAIN WATER PIPES.

Per yd. in 6 fts.	Pipe	Bends. Angles.	Branches.
2 in.	5/–	2/7	3/10
2½ in.	5/3	3/–	4/6
3 in.	5/10	3/8	5/6
3½ in.	6/8	4/5	6/5
4 in.	7/8	5/3	7/8

NET PRICES.
Tonnage allowance—4-ton lots, 5 per cent.
2-ton lots, 2½ per cent.

L.C.C. COATED SOIL PIPES.—London Prices, ex stock.

Per yd. in 6 fts.	Pipe	Bends	Branches.
2 in.	5/11	4/6	5/6
2½ in.	6/3	5/1	6/10
3 in.	6/11	5/6	8/3
3½ in.	7/10	6/10	9/6
4 in.	8/11	7/8	11/1

L.C.C. COATED DRAIN PIPE.

	cwt. qr. lbs. in 9 fts.	per yard.	Bends.	Branches.
4 in.	1 1 17	13/1	12/3	21/6
6 in.	2 0 1	19/6	25/4	43/9

	Per ton basis in London £ s. d.
IRON.—Staffordshire Crown, Merchant quality	28 5 0
IRON.—Staffordshire Marked Bars	36 0 0
Mild Steel Bars	22 10 0
Mild Steel Hoops	23 17 6
	Ex Merchant's Stock. per ton (two-ton) lots £ s. d.
Soft Steel Sheets. C.R. and C.A.—	
20 gauge	28 7 6
24 gauge	29 7 6
26 gauge	29 12 6
Galvanised Corrugated Sheets, 6 ft. to 9 ft.—	
20 gauge	34 15 0
24 gauge	36 10 0
26 gauge	38 15 0
Galvanised Flat Sheets, C.R. and C.A.—	
20 gauge	35 15 0
24 gauge	37 10 0
26 gauge	39 15 0
	Per ton. £ s. d.
CUT Nails, 3 in. and up, 1 ton lots	36 15 0
ALL NET.	

METAL WINDOWS.—Standard sizes suitable for complete houses, included all fittings, painting two coats, and delivery to job, average about: 5s. 0d. to 5s. 3d. per foot super.

LEAD, &c.

(Deliveries in London 5 cwts.)	Per ton. £ s. d.
LEAD.—Sheet, English, 3½ lb. and up	107 10 0
Pipe in coils	108 15 0
Soil pipe	112 15 0
Compo pipe	115 15 0

NOTE.—Country delivery, 10/– per ton extra, lots under 3 cwt., 4/– per cwt., extra and over 3 cwt. and under 5 cwt., 3/– per cwt. extra. Extra if cut to size. Old lead, ex London area, per ton, £68 0 0. Buyers pay carriage.

BUILDING TRADE WAGES IN SCOTLAND

Following are grade rates authorised by the Scottish N.J.C. from November 17, 1947. Every effort is made to ensure accuracy, but we cannot be responsible for errors that may occur.

Grade Classification A Craftsmen..... 2/9 Labourers 2/2½

Aberdeen .....A	Dumfriesshire ....A	Inverness .....A	Perthshire .....A
Ayrshire .....A	Dundee .....A	Inverurie .....A	Peterhead .....A
Banff .....A	Dunoon .....A	Kincardineshire ..A	Renfrewshire .....A
Berwickshire .....A	East Fife .....A	Kinross-shire .....A	Rothesay .....A
Bridge of Allan....A	East Lothian.....A	Lanarkshire .....A	Roxburghshire ....A
Broughty Ferry....A	Edinburgh .....A	Midlothian .....A	St. Andrews .....A
Clackmannanshire A	Fifeshire .....A	Monifieth .....A	Selkirkshire .....A
Doune .....A	Forfarshire .....A	Moray and Nairn ..A	Stewartry .....A
Dunblane .....A	Glasgow .....A	Newport .....A	Stirlingshire .....A
Dunbartonshire ..A	Greenock .....A	Peeblesshire .....A	Stornoway .....A
Dumfries .....A	Hamilton .....A	Perth .....A	Tayport .....A
			West Lothian ....A

The Scottish N.J.C. award on which this is based provides for variation to current rates of Apprentices' and Trainees' wages, which will be increased according to scale.
The Information given in this table is copyright.
Painters' rates: 2/9 Grade A; 2/8 Grade B. (Grade B towns are Banff and Moray and Nairn).

GLASS.

SHEET GLASS, ORDINARY GLAZING QUALITY. CUT SIZES. Per ft. Super d.

18 oz.	4½
24 oz. clear	5½
26 oz.	7½
32 oz.	9½

ENGLISH ROLLED PLATE AND FIGURED CATHEDRAL, ETC., IN CUT SIZES.

Over 500 ft. super of all kinds.	Per ft.
Rolled plate, ¼ in.	7½
Rough cast, 3/16 in.	8½
Rough cast, ¼ in.	8½
Figure rolled, and Cathedral white	7½
Figure rolled, and Cathedral tinted	10½
Rolled sheet	6
Reeded, Broad Reeded, Cross Reeded and Chevron Reeded, ¼ in. thick	11
Rolled plate is the same price as rough cast double rolled.	Per ft. s. d.
Wire Cast, ¼ in. thick	0 9½
Georgian Wired Cast	0 10½

HOLLOW GLASS BLOCKS.

		s. d.	
P.B.	2—5½ in. x 5½ in. x 3½ in.	2 6	each net
P.B.	3—7½ in. x 7½ in. x 3½ in.	3 6	"
P.B.	32—7½ in. x 7½ in. x 3½ in.	3 6	"
Radiused Corner Brick to match up with—			
P.B.	2	4 6	"
P.B.	3	6 0	"
P.B.	32	6 0	"

TIMBER, SOFTWOODS AND HARDWOODS.

HOME GROWN TIMBER PRICES.—See *Statutory Rules and Orders*, 1947, No. 94, price 5d. net.
IMPORTED SOFTWOODS PRICES.—See *Statutory Rules and Orders*, 1947, No. 731, price 1s. 1d. net.
IMPORTED HARDWOODS PRICES.—See *Statutory Rules and Orders*, 1947, No. 1524, price 1s. 1d. net.
Note.—The above can be obtained from H.M. Stationery Office, York House, Kingsway, W.C.2.

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THE SCOTTISH BUILDER

NEW BUILDINGS

Broomhouse.—Alterations, additions and extensions at Elmbank, for which the architect is J. S. Ross, 82, Main-st., Wishaw.

Glasgow.—Alterations, etc., at Dunbarton-rd., for the Western Infirmary, for which the architect is R. Love, 10, Kingsdyke-ave., Glasgow.

Glasgow.—At Gratton-st., Corporation to erect large block of flats, for which the architect is R. Bradbury, 20, Trongate, Glasgow.

Lanarkshire.—At London-rd., the Carmyle Concrete Co., Ltd., 163, St. Vincent-st., Glasgow, to erect new buildings.

Netherton.—New residence, for which the architects are Cowie & Miller, 45, Cleland-rd., Wishaw.

Newhouse.—New building at Industrial Estate, for which the architects are Wylie, Shanks, Wylie, 204, West Regent-st., Glasgow.

Pettiman.—New housing scheme, for which the architect is S. MacColl, Beckford-st., Hamilton.

Strathavon.—New housing scheme, for which the architect is S. MacColl, Beckford-st., Hamilton.

British Standards.

Copies of the recently published British Standard for "Metal Window Sub-frames, Sills and Window Boards" (B.S. No. 1422) can be obtained from Sales Department, British Standards Institution, 24, Victoria-street, S.W.1, price 3s. (post free). The British Standard Code of Practice (C.P.324.403), "Installation of Vapour Compression Type Domestic Electric Refrigerators," is also obtainable from this address at 2s. (post free).

International Contest.

One of the principal future activities of the Architectural Faculty Bureau of the International Union of Students in Prague will be to organise, encourage and co-ordinate exhibitions and contests, both national and international. The bureau has now published the rules for the first international contest of projects of architectural students. Architectural students of all the member organisations of the I.U.S. can enter for this competition, and the bureau may also admit the projects of students belonging to organisations which are not members. The contest is limited to projects in architecture and in urbanism (any theme). The architectural projects should consist of pictures of plans, of elevations, of sections, of perspectives (at least two perspectives for each project), and the general situation in a suitable scale. The projects in urbanism should also contain at least a general perspective and a perspective from a particular point of the project. The competition is being organised in connection with the Architectural Students' Association's international congress which will be held from August 24 to September 3. Full particulars can be obtained from the Association, at 34-36, Bedford-square, W.C.1.

FUTURE CONSTRUCTION

PUBLIC APPOINTMENTS

Full details of Public Appointments open will be found in the Advertisement pages of this and previous issues.

CONTRACTS OPEN

For some contracts still open but not included in this list see previous issues. Those with an asterisk are advertised in this number. The dates at the heads of paragraphs are those for the submission of tenders; a dagger (†) denotes closing date for applications; the name and address at the end refer to the person from whom particulars may be obtained.

BUILDING

JUNE 11.

†*Cheshunt U.D.C.—44 houses at Bury Green estate. Clifford Tee & Gale, Moorgate Hall, 153, Moorgate, E.C.2. Dep. £2 2s.

†*The Sutton Dwellings Trust.—44 dwellings with roads and sewers at West View site, Hartlepool. Charles S. Errington, 46, Grainger-st., Newcastle-upon-Tyne 1. Dep. £2 2s. Tenders by July 12.

JUNE 14.

Canterbury T.C.—22 houses at Spring-la. site. City A. Dep. £2 2s.

***Canterbury T.C.**—4 temporary workshop blocks at Technical College, Barton Court. City A. Dep. £2 2s.

Doncaster T.C.—22 houses at Intake estate. Estates S., 15, South-parade. Dep. £3 3s.

Haltemprice U.D.C.—32 houses and ancillary works at Hull-rd. R. G. Clark, architect, Scale-la., Hull. Dep. £2.

Hereford T.C.—20 houses and 40 maisonettes at Holmer-st. estate. T.C. Dep. £2 2s.

Hertford T.C.—12 houses with drains, paving and boundary fences at Upper Cockbush Field site. T.C., The Castle. Dep. £2 2s.

†*Heston and Isleworth T.C.—18 flats at Hounslow West estate. B.E. & S. Dep. £3 3s. Tenders by July 6.

Kiveton Park R.D.C.—10 houses at Goosecarr-la., Todwick. S., Council Offices. Dep. £2 2s.

South Shields T.C.—Houses and shops as follows: (a) 8 two-storey; (b) 40 two-storey; (c) 12 two-storey and 24 single-storey; (d) six shops with flats above. J. Reid, B.E. Dep. £2 2s.

†West Riding C.C.—Stage one of proposed modern school at Worsborough Dale, nr. Barnsley. County A., County Hall, Wakefield.

†West Sussex C.C.—Demolition of 7 shelters and erection of canteen kitchen and dining-room at Central C.E. Boys' School, New Park-rd., Chichester. F. R. Steele (F.), County A., Chichester.

JUNE 15.

†*Bath T.C.—Alterations, repairs and decorations at 54, 55, 56, Southgate-st. Surveyor of Corporate Property, Guildhall. Dep. £2 2s.

Ches. C.C.—Kitchen and dining-room at Sale Cecil-ave. Modern Secondary Schools. E. M. Parkes, County A., Chester. Dep. £2 2s.

Ches. C.C.—Additional classrooms at Alsager County Primary School. E. M. Parkes, County A. Dep. £2 2s.

Gillingham T.C.—Two-storey flats in two groups of two blocks of four flats at Medway-rd. B.E. & S. Dep. £5 5s.

Hatfield R.D.C.—8 cottages, Essendon, and 6 cottages, Little Heath. J. H. Parker (A.), 82, Gt. North-rd., Hatfield. Dep. £2 2s.

Liverpool T.C.—Canteen at wholesale fruit and vegetable market, Cazneau-st. City A. & Director of Housing. Dep. £2 2s.

JUNE 16.

***Lincoln-Kesteven C.C.** — Alterations at Eltham House, Grantham. C. B. Metcalfe (F.), County A., County Office, Sleaford.

†*Norfolk E.C.—New boys' and girls' offices with necessary drainage at Hingham County Primary School. W. O. Bell, Chief Ed. Officer, County Ed. Offices, Stracey-rd. Norwich.

***St. Marylebone B.C.**—Applications invited from builders for inclusion in panel for housing work. Application forms from Housing Director, 128-134, Baker-st., W.1.

†*West Ham C.B.—26 houses, Paul-st. Boro' A. and Planning Officer, 100, West Ham-la., E.15. Dep. £2 2s.

Wycombe R.D.C.—30 houses and incidental works at Princes Risborough and Downley. J. M. Smith (F.), 28, High-st., High Wycombe, Bucks. Dep. £3 3s.

JUNE 17.

Herne Bay U.D.C.—16 houses at School-la., Herne. E. & S. Dep. £2 2s.

Macclesfield R.D.C.—30 houses at 4 sites. J. H. Walters, 19, Moody-st., Congleton. Dep. £2 2s.

Sevenoaks R.D.C.—48 houses at Rye-la., Otford. E. & S., "Inglewood," Oak Hill-rd. Dep. £2 2s.

JUNE 18.

Dunstable T.C.—32 old people's dwellings and one warden's flat at Beecroft estate. R. R. Hole, B.S. Dep. £2 2s.

***Durham County Police Authority.**—3 pairs of police houses at Coleridge-gdns., Darlington. G. R. Clayton (F.), County A., Court-la., Durham.

†Glos C.C.—New maternity unit at Stroud. County A., Shire Hall, Gloucester. Dep. £2 2s.

JUNE 19.

Barnes T.C.—16 flats at Mullins Path, Mortlake. B.E. & S. Dep. £2.

†Penzance T.C.—12 houses at Alverton estate (Contract 17, section No. 1); 9 houses at Mousehole (Saltponds, Contract 18). T.C. Dep. £2 2s. each contract.

JUNE 21.

Brighouse T.C.—32 houses in two groups. B.E. & S. Dep. £2 2s.

Huntingdon E.C.—Classroom hut, cycle shed and conversion of existing cycle shed into store at Fletton Secondary School, Fletton. T. H. Longstaff, County S. & A., Walden House.

***Ilford T.C.**—44 houses at Barley-la., Contracts A and B; 60 houses at Oaks-la., Contracts C and D. B.E. & S. Dep. £4 4s.

***Richmond (Surrey) T.C.**—30 houses, Hawker's Field (North), Ham. B.E., Hotham House, Heron-court, Richmond. Dep. £3 3s.

***York T.C.**—42 houses and 11 blocks of flats at Muncaster estate. Chas. J. Minter, City E. & Architect, Guildhall. Dep. £2.

JUNE 22.

Bournemouth.—20 houses (Contract "F") at Berrans estate. Boro' A. Dep. £2 2s.

Chesterfield T.C.—60 houses at Highfield-rd. B.E. & S. Dep. £2 2s.

Littlehampton U.D.C.—30 dwellings in 2 contracts. E. & S., Council Offices, Manor House. Dep. £2 2s.

***Ross-on-Wye U.D.C.**—10 houses at Three Crosses estate. E. T. Wraight, quantity surveyor, 18, Orchard-st., Bristol 1. Dep. £2 2s.

JUNE 23.

Broadstairs and St. Peter's U.D.C.—20 houses at Westover-rd. E. & S., Pierremont Hall, Broadstairs. Dep. £2 2s.

Lindsey E.C.—Canteen and dining-room for Louth Grammar Schools at Westgate House-garden. County A., County Offices, Lincoln.

***Sutton and Cheam T.C.**—Messing and lavatory accommodation at Worcester Park Refuse Disposal Works. B.E. & S. Dep. £2 2s.

***Sutton Coldfield T.C.**—20 flats and 4 shops at Tower-rd. estate. B.S., Council House. Dep. £2 2s.

JUNE 24.

Derby C.B.—Alterations and adaptation of M.A.P. Hangars (second sections), Omnibus Depot, London-rd., Alvaston. Thos. W. East (F.), Boro' A., Council House. Dep. £2 2s.

JUNE 25.

***Lowestoft T.C.**—62 houses at No. 1 housing site, Yarmouth-rd. B.E. Dep. £2 2s.

JUNE 28.

Angus C.C.—Work in various trades for extensions at Arbroath High School. J. M'Gregor, Master of Works, County-bldgs., Forfar.

***Basingstoke T.C.**—Two blocks of 8 flats at South View housing estate. B.S. Dep. £2 2s.

***Clun R.D.C.**—4 houses with site works at Marton. N. P. Vaughan Pryce, C., Council Offices, The Square, Bishop's Castle. Dep. £2 2s.

***Guildford T.C.**—36 old people's bungalows at Laburnum-cl., Bellfields estate. B.E. & S. Dep. £2 2s.

JUNE 30.

***Brighton C.B.**—52 houses in three contracts at Hollingbury estate. B.E. & S. Dep. £2 2s. each contract.

***Camelford R.D.C.**—4 houses at Dark-la. and 8 at Bossinney-rd. Andrew & Randell, Hepworth-chbrs., St. Austell.

JULY 5.

***Bucks C.C.**—Proposed Infants' School at Cippenham, Slough. Clerk, County Hall, Aylesbury. Dep. £5 5s.

***Shebbear College, Beaworthy, N. Devon.**—Dining-room and kitchen extensions, for Trustees. F. R. S. Yorke, E. Rosenberg and C. S. Mardall (F. & A.), 2, Hyde Park-pl., London, W.2. Dep. £2 2s.

PAINTING, ELECTRIC LIGHTING, MATERIALS, ETC.

JUNE 12.

***County Mental Hospital, Prestwich, Manchester.**—Internal and external painting of certain buildings. Clerk and Steward.

JUNE 16.

Coventry E.C.—Painting and decorating of schools. Director of Education, Council House.

West Riding C.C.—Painting of 14 bridges. County S. & E., County Hall, Wakefield. Dep. £1.

JUNE 17.

***Sunderland E.C.**—Supply and installation of central heating and hot water supply apparatus at Primary Infants' School, Springwell. Ed. Architect, Mowbray Villas, Ryhope-rd. Dep. £2 2s.

JUNE 22.

***Chertsey U.D.C.**—External painting and minor repairs to houses at Victory Park-rd. and St. George's-rd., Addlestone. E. & S.

JUNE 23.

Chippenham T.C.—External painting of 102 houses. B.E. Dep. 10s. 6d.

JUNE 28.

Finchley B.C.—External and internal decorations at Christ's College, Woodhouse and County Schools. B.E. & S. Dep. £2.

***Liverpool Corporation Water Works.**—External painting of Lake Vyrnwy Hotel. Water E., 55, Dale-st.

JULY 10.

***Beds C.C.**—Remodelling of heating system at Dunstable Northfields Secondary Modern School. County A., Shire Hall.

ROADS, SEWERAGE AND WATER WORKS

JUNE 11.

†North Walsham U.D.C.—Roads and sewers at People's Park estate. E. & S., Council Offices. Dep. £3 3s.

JUNE 14.

Chesterton R.D.C.—Supply and laying of 2,987 yds. of 4-in. and 150 yds. of 3-in. asbestos cement mains, etc. E. & S., County Hall, Hobson-st., Cambridge. Dep. £2 2s.

Darlaston U.D.C.—Road and footpaths at Cock Heath site. E. & S., 49, Church-st. Dep. £2 2s.

Kent C.C.—Making-up Warren-rd., Wilmington. County S. Dep. £2.

Warminster U.D.C.—Sewage disposal works at Henford's Marsh. Lemon & Blixard, Castle-la., Southampton. Dep. £5 5s.

JUNE 15.

Bath T.C.—Roads and sewers, etc., at Twerton estate. City E.

Braintree R.D.C.—Roads and sewers at Faulkbourne-rd., White Notley. E. & S., Council Offices, St. Peter's-cl., Bocking, Braintree.

Wolverhampton C.B.—New foul sewer from Greenfield-la. to Westcroft, Cannock-rd. B.E. Dep. £2 2s.

JUNE 16.

***Derby C.B.**—Drainage scheme and earthworks, etc., at City Hospital. Thos. W. East (F.), Boro' A. Dep. £2 2s.

Doncaster C.B.—Main sewerage and surface water drainage scheme at Wheatley Low Wood. (Intake.) T.C. Dep. £5.

Ebbw Vale U.D.C.—Surface dressing of roads. E. & S.

Horsham R.D.C.—Roads and sewers at Southwater. S.

Sherborne R.D.C.—1,000 yds. of 6-in. stoneware

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or concrete sewers with small disposal works. Aubrey J. Allen, F.R.I.C.S., Half Moon-st., Sherborne. Dep. £2 2s.

JUNE 17.

Sevenoaks R.D.C.—Roads and sewers at Rye-la., Otford. E. & S., "Inglewood," Oak Hill-rd. Dep. £2 2s.

Sevenoaks R.D.C.—Roads and sewers at Bullfinch-la., Chevening. E. & S. Dep. £2 2s.

JUNE 18.

Dendraeth R.D.C.—Sewerage and sewage disposal works at Trawsfynydd. Richards & Dumpleton, Cornwall-bldgs., 45, Newhall-st., Birmingham 3. Dep. £5 5s.

Kendal T.C.—Street and drainage works at Haligarth estate. B.E. & S. Dep. £2 2s.

JUNE 21.

Aircheorough U.D.C.—Roads and sewers at Haw-la., site No. 2, Yeadon. E. & S., Micklefield House, Rawdon. Dep. £2 2s.

North Devon Water Board.—Laying and jointing of approx. 640 lin. yds. of 15 in. dia., 19,820 yds. of 12 in. dia., and 23,550 yds. of 10 in. dia. spun-iron pipes, and 8,205 lin. yds. of 12 in. dia. and 11,895 yds. of 10 in. dia. bitumen-lined steel pipes, etc. Rofe & Raffety, 3, Victoria-st., Westminster, S.W.1. Dep. £2 2s.

Ongar R.D.C.—Roads and sewers at Mill-la., High Ongar. E. & S. Dep. £2 2s.

Staffs C.C.—Making-up Park-rd., Chase-terr. C., County Buildings. Dep. £1 1s.

†**Wycombe R.D.C.**—Surface water drainage and sewerage and sewage disposal. D. Balfour & Sons, 131, Victoria-st., Westminster, S.W.1. Dep. £5.

† **Wycombe R.D.C.**—Concrete roads at Bourne End housing site. Brocklehurst & Cooper, 11a, Crendon-st., High Wycombe. Dep. £2.

JUNE 22.

Neath R.D.C.—Sewers and sewage disposal works at Clyne. E. & S., 13, Orchard-st., Neath. Dep. £5 5s.

JUNE 23.

Ealing T.C.—Making-up private streets. B.E. Dep. £2 2s.

Guildford R.D.C.—340 lin. yds. of soil sewer at Gomshall. E. & S. Millmead House. Dep. £2 2s.

JUNE 25.

Godalming T.C.—Laying and jointing of new water mains. Water E., Municipal-bldgs., Dep. £2 2s.

JUNE 28.

Cuckfield R.D.C.—Preparation of Poynings housing site. E. & S. Dep. £2 2s.

Isle of Wight R.D.C.—1,700 yds. of asbestos cement water main, etc., at Newchurch. Lemon & Blizard, Castle-la., Southampton. Dep. £5 5s.

GENERAL BUILDING WORK
(LONDON)

Balham.—REBUILDING.—Of 2-10, Gateside-rd. P. Roffey, architect, 1, Putney-hill, S.W.15.

Bermondsey.—BUILDING.—Plans are being prepared for single-storey office building at Raymouth-rd., for Maguire & Murray, Ltd. Scheme in early stage and contracts not yet placed. Architect, A. H. Russell, 9, Duke-st. Hill, S.E.1.

Brentford.—ADDITIONS.—To factory at Brook-la., for Trico-Folberth, Ltd. H. St. John Harrison, architect, 1, Babmaes-st., S.W.1.

Bromley.—HOUSING.—T.C. to erect 400 houses at Hayes-pl. estate; 60 houses at Heathfield, Keston; 50 houses at Princes-plain; and 250-300 at the Coppice estate.

Croydon.—FLATS.—T.C. to build 16 two-roomed flats for old people at Woodside.

Ealing Green.—OFFICES.—Erection of temporary offices, adjoining West Ealing Studios, Ltd. R. Atkinson, architect, 13, Manchester-sq., W.1.

East Ham.—REPAIRS.—To 323-325, Barking-rd. T. Young & Son, architects, 84, East-st., Barking, Essex.

Hampstead.—REBUILDING.—L.C.C. is considering an application for permission to rebuild appeal department and laboratories at 2 to 4, Fitzjohn's-ave., for Marie Curie Hospital.

Ilford.—SCHOOL.—C.C. to erect Strafford-ave. school.

Ilford.—REBUILDING.—8 houses at 137-151, Coventry-rd. T. Llewellyn Daniel, architect, 4, The Green, Richmond, Surrey.

Stoke Newington.—FLATS.—B.C. to invite tenders for erection of 116 flats at Green-lanes.

Stoke Newington.—HALF-WAY HOUSES.—B.C. invite tenders for conversion of requisitioned houses in Seven Sisters-rd. and Stoke Newington High-st. into half-way houses.

Uxbridge.—HOUSING.—M.H. given U.D.C. permission to erect 46 houses at Glebe-ave., Ickenham, and 70 at Nine Elms, Cowley.

Walthamstow.—HOUSES.—7 houses at 64-66, Pearl-rd. S. Chetwood & Sons, architects, Waltham Abbey, Essex.

Wembley.—EXTENSION.—T.C. approved extension to factory at Mount Pleasant for Best Foods, Ltd.

Willesden.—REBUILDING.—Of 16-22, Chandos-rd. P. R. Wright, architect, 1, Albert-rd., South Norwood.

Willesden.—REBUILDING.—Of 92-96, Cainfield-ave. G. A. Sexton & Sons, architects, 42, Kilburn High-rd., N.W.6.

(PROVINCIAL)

Ashton-under-Lyne.—T.C. approved:—Extensions to foundry, Wellington Works, National Gas and Oil Engine Co., Ltd.; rebuilding factory, Mount Pleasant-st., Robert Fish, linoleum manufacturer, 15, Warrington-st.

Blackburn.—E.C. propose primary school at Roman-rd.

Bromsgrove.—R.D.C. approved houses, Back-la., Romsley, C. Walker; Cobs Barn Farm, Alvechurch, W. Russell; Kidderminster-rd., Hagley, H. Detheridge & Sons; Back-la., Romsley, E. R. Whitehouse; bungalows, Farley-la., Belbroughton, H. A. Walker.—U.D.C. approved ice cream factory and store, Forest Hill, Lickey-end, W. L. Wallace.—Alterations and additions to British Legion Club, for Bldg. Cttee.—U.D.C. propose 86 additional houses.—Worcestershire C.C. propose conversion work at All Saints' Hospital.

Chesterfield.—T.C. to submit plans to M.H. for 112 houses at Highfield site.

Dorchester.—46 houses, Middle Farm estate, for B.C. Magnus Austin, architect, 28, High East-st.

Lowestoft.—Town planning approval given in principle to proposals to rebuild and reconstruct war-destroyed or damaged properties at Nos. 9, and 10, The Prairie, 14 and 16, Stanford-st., 52, 52a and 53, Tonning-st., and No. 1, Maidstone-rd. Plans by Mr. E. C. Allerton (L.), 43a, London-rd. South, Lowestoft.

Manchester.—T.C. approved:—Alterations for business premises, 74, Conran-st., Harpurhey, for S. Allison (E. E. Costello, architect, 325, Langworthy-rd., Seedley, Salford 6); alterations and additions to Three Crowns Hotel, 502/504, Oldham-rd., Newton Heath, for Wilsons Brewery Co., Ltd. (S. C. Emerson, resident architect, Brewery Offices, Monsall-rd., Newton Heath); additions to works, Vesta-st., Ancoats, Clifford Whatmough, Ltd. (J. Paley Parrish (L.), 30, Broad-rd., Sale, Cheshire); works canteen and additional lavatories, Varley-st., Miles Platting, (Hardman & Holden, Ltd., Manex House).

Middleton.—The Diocesan Reorganisation Committee, Diocesan House, 90, Deansgate, Manchester 3, propose church, vicarage and institute at N.W. quadrant of Mainway-Kirkway Circus.

Workington.—T.C. approved:—S.D. houses, Stainburn-rd., for Allan Steele; bus station, Oxford-st. and Vulcan-la. junction, for Cumberland Motor Services, Ltd.; alterations and additions, working men's club, Station-rd., for Bldg. Cttee.

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TENDERS

* Denotes *accepted*.
† Denotes *provisionally accepted*.
‡ Denotes *recommended for acceptance*.
§ Denotes *accepted subject to modification*.
¶ Denotes *accepted by H.M. Government departments*.

Banbury.—12 houses at Milcombe, for R.D.C.: *W. T. Hicks, Sibford-rd., Hook Norton, Oxon.

Belfast.—Extension of factory for Fairbairn, Lawson, Coombe, Barbour, Ltd., Leeds. Anthony F. Lucy, M.I.R.A.I., architect, 13, Lombard-st., Belfast. Steelwork: R. J. McKinney, Ltd., 2b, Alexander Park-av.

Birkenhead.—Erection of school in Bedford-dr., Rock Ferry, for T.C.: ‡Lloyd & Cross, £84,833.

Blackburn.—Extensions to works, Daisyfield, for British Northop Loom Co., Ltd. H. S. Fairhurst & Son (FF.), Chancery-bldgs., 55, Brown-st., Manchester 2: *J. Gerrard & Sons, Ltd., Pendlebury-rd., Swinton.

Blackpool.—Extensions to works, Clifton-rd., for D. Stansfield, Ltd. Gorst & Crabtree (L.), 7, Birley-st.: *Clifton Constructions (Blackpool), Ltd., Clifton-rd., Marton, Blackpool.

Bolton.—Completion of Bolton Technical College, Manchester-rd., for E.C. Lanchester & Lodge (FF.), 10, Woburn-sq., Bloomsbury, W.C.1: *R. Mosley, Charnock-st., Bolton, £43,820.

Bootle.—150 houses, Copy-la., Netherton, for C.B. W. A. Harrison, O.B.E., M.Eng.(L'pool)., M.I.C.E., M.I.Mun.E., B.E. and S.: *Netherton Building and Construction Co., Ltd., Church-rd., Litherland, Liverpool 21 (subject to M.H. approval).

Broadstairs and St. Peter's.—16 houses at Westover-rd. estate, for U.D.C. S. W. Richardson, M.Inst.Mun.E., M.I.R.A. Two pairs by *Tyler (Contractors), Ltd., 6, Park-rd., Ramsgate, £4,313; two pairs by *Home Bros., 19, St. Mildred's-rd., Ramsgate, £4,330; four pairs by *A. J. Tatham, 208, High-st., Orpington, £7,664.

Buckingham.—Six houses with site works at Padbury, for R.D.C. Scherrer & Hicks (FF.): ‡Y. J. Lovell & Sons, Ltd., Gerrards Cross, £9,996.

Chadwell Heath.—Factory for J. R. Sears & Co., Ltd., The Limes, Beehive-la., Ilford. John Reeve Young, architects, 165, Grays Inn-rd., W.C.1: *J & J. Dean, Ltd., Ruckholt Works, Ruckholt-rd., E.10.

Chester-le-Street.—Additions to St. Cuthbert's school: *F. W. Mole & Son, Front-st., Chester-le-Street, Co. Durham.

Cookham.—22 houses at two sites, for R.D.C. F. Woods (F.), Maidenhead: *J. M. Jones & Sons, Maidenhead, £13,902 (10); *Halfacre & Young, Maidenhead, £16,172 (12).

Coventry. — Rebuilding Municipal Primary school, Radford, for E.C. D. E. E. Gibson, M.A. (A.), C.A., 1a, Warwick-row: *William Moss & Son, Ltd., Queen's-rd., Loughborough, Leics., £68,299.

Croydon.—Houses for C.B. 100 B.I.S.F. houses at New Addington estate: *Henry Boot & Son, Ltd., 10, The Boltons, London, S.W.10, £130,700; 48 Easiform houses at Fisher's Farm site, New Addington estate: *John Laing & Sons, Ltd., Mill Hill, N.W.7, £66,159; 22 houses at Heathfield estate: *Boro' Valuer, 71, Park-la., Croydon, £31,742; 10 houses at Ashburton estate: *G. E. Hubble, 48, Carmichael-rd., S.E.25, £13,353.

Cumberland.—Clinic at Egremont, for C.C.: *G. Wimpey & Co., Ltd., Jesmond, Newcastle-on-Tyne, £7,609.

Cumnock.—200 houses for miners: *Scottish Special Housing Association Ltd., 15, Palmerston-pl., Edinburgh 12.

Dagenham.—Works, for T.C.: 28 houses at Dagenham-rd. estate, *Boro. S., £37,794 (work commenced); 12 flats at Blackborne estate, *S. R. Bryett, £12,483.

Doncaster.—Second stage of new Kingfisher school, for E.C. W. W. Thomas, senior education architect, Municipal Offices: *Hemsworth Bros., 62, Ravensworth-rd.

Droitwich.—Eight houses at Wychbold, for R.D.C. Pritchard, Godwin & Clist (FF.), Bank-bldgs., Kidderminster: ‡R. W. Morris, The White Cottage, Rustwick, Worcester, £10,560.

Droitwich.—12 houses, Stalls Farm site and Roundabouts estate, for T.C. G. L. Robinson, B.S., Town Hall: *Tanks & Linings, Ltd., Droitwich (8): *George Bourne, Ltd., Alexandra-av., Droitwich (4).

Durham.—Alterations and additions to Chester-le-Street County School, for E.C. G. R. Clayton, Court-la., C.A.: *Cross & Barlow, Ltd., Queen Victoria-rd., Newcastle-on-Tyne, £7,272.

Eastbourne.—Rebuilding pavilion at The Saffrons. B. Stevens, architect, 31, Cornfield-rd., Eastbourne: *Prospect Houses, Ltd., 35, Seaside, Eastbourne.

East Ham.—Repairs to 76-78, High-st. South. R. J. Harrison, architect, 20, Townsend-dr., St. Albans, Herts: *J. E. Finer & Sons, Ltd., 167, Burdett-rd., E.3.

Essex.—Erection of two staff houses at Chafford school and provision of roadway, services, etc.: †Edward Saunders & Son, Dovercourt, £8,298.

Fordon.—Six traditional houses, with service road, drainage and sewage disposal plant at Middletown, for R.D.C. J. Brian Cooper (F.), Corporation-st., Birmingham 4: *A. E. Sorrill, 71, Birmingham-rd., West Bromwich, Staffs. £13,821.

Fordon.—Site preparation and erection of eight "Airey" houses at Churchstoke, for R.D.C. J. Brian Cooper (F.), Corporation-st., Birmingham 4: *George Edwards (Builders), Ltd., Little Orchard, Minsterley, Shrewsbury. £19,167.

Friern Barnet.—4 houses at Colney Hatch-la., for U.D.C.: *Charles Denton, £4,976.

Gipping.—Six houses at Willisham, for R.D.C. R. C. Riches, architect: *F. Sparrow & Son, Needham Market, nr. Ipswich, £8,351.

Hackney.—Hutted nursery at Cawley-rd., for B.C.: *Direct Labour, £8,727.

Hartlepool.—Eight shops at West View, for T.C. R. H. Snowball, B.E.: †W. W. Brazell, Ltd., Raeburn-st., West Hartlepool.

Hatfield.—12 Airey houses at Essendon, for R.D.C.: *S. B. Budge & Co.

Hertford.—Six houses at Benington, for R.D.C. D. C. Denton-Smith, 40, Regent-st., Cambridge.: *J. Dixon & Son (Ware), Ltd., 22, Amwell-end, Ware.

Ilford.—36 flats at Budoch-dr. site, for B.C. L. E. H. Reynolds, B.E. & S.: *S. C. Grover, Ltd, Grange Works, Clinton-rd., Forest Gate, E.7 (amended address).

Ince-in-Makerfield.—30 houses at Petticoat-la., for U.D.C.: *J. Gaffney & Son, Wigan.

Kidderminster.—Rebuilding shop and showroom at Worcester-st., for Jones of Kidderminster, Ltd. Gethin & Rolley, architects, Kingsley-bldgs., Kidderminster: *Walker & Sons, Ltd., New-rd., Kidderminster.

Knutsford.—10 houses at Thorneyholme estate, for U.D.C. G. R. Butler, Council S.: *J. P. Kemp & Co., 54, The Downs, Altrincham, £11,780.

Lexden and Winstree.—10 "Airey" houses at Eight Ash-green, for R.D.C.: *L. Williams (4), £1,444 each; *E. J. Busbridge, Mersea-rd., Colchester (6), £1,450 each.

Leyton.—Conversion into factory of L.M.S. Railway Arches, 244-245, High-rd., for Beley Mica and Plastic Co., 356, High-rd., E.11. H. H. Doughty & Partners, architects, 55, The Mall, S.W.1: *J. & S. Jackson, 21, Colchester-rd., E.10.

Leyton.—Rebuilding 31-39, Drayton-rd. S. J. Squire, architect, 89, Oakes-av., Worcester Park: *W. M. Brand, 172, Osbaldestone-rd., N.16.

Leyton.—Alterations to New Model Laundry, Norlington-rd. C. Living & Son, architects, 233, Leytonstone-rd., E.5: *J. Jackson, 21, Colchester-rd., E.10.

Lincoln.—Police house at Castle Bytham, for C.C. C. B. Metcalfe (F.), County A., County Offices, Sleaford, Lincs: *Harwood Bros., Corby, Grantham, Lincs.

Liverpool.—Central school kitchen, dining-room and scullery at Kingslake Municipal school, Edgehill, for E.C. Sir L. H. Keay (F.), C.A., Blackburn-chbrs., Dale-st., Kingsway: *Richard Costain & Son (Liverpool), Ltd., Barlows-la., Fazakerley, Liverpool 9.

Liverpool.—Works, for City Council: Conversion of 22 war emergency houses at Speke into parlour-type houses, *Unit Construction Co., Ltd., Bentham-dr., Liverpool, £23,320; 92 houses at Brook House estate, *Netherton Building Co., Ltd., Church-rd., Litherland, Liverpool 21; reinstatement of five flats at Gildarts-gdns., Limekiln-la., *J. E. Aspinall, Ltd., Signal Works-rd., Liverpool 9, £6,972; 48 flats in 3 blocks at Brook House estate, *R. J. Barton & Sons, Ltd., 666a, Liverpool-rd., Ainsdale, Southport, £36,252; 10 flats and 10 shops at Cantril Farm estate, *J. L. Rawsthorne & Co., Belvidere Sawmills, Wallasey, Ches. (all subject to M.H. approval).

London.—Repairs to 35, Lowndes-sq., S.W.1. Berryman & Co., architects, 102, Brompton-rd., S.W.3: *Knightsbridge Builders & Decorators, Ltd., 102, Brompton-rd., S.W.3.

London.—Repairs to Shelton House, Sloane-st., S.W.1. Marcus Leaver & Co., architect, 46, Brook-st., W.1: *F. & F. H. Higgs, Ltd., Station Works, Hinton-rd., S.E.24.

London.—Conversion into flats of 73, Pont-st., S.W.1. Guy Morgan & Partners, architects, 36, Upper Mall, Hammersmith, W.6: *Hawkins & Barnes, 30a, Gloucester-st., S.W.1.

†London (Admiralty).—Portland, Gunnery Establishment, steelwork, Cargo Fleet Iron Co., Ltd., 21, Tothill-st., S.W.1; Invergordon, reconstruction of pier, Yorkshire Hennebique Contracting Co., Ltd., Viaduct Works, Kirkstall-rd., Leeds 4.

†London (Air Ministry).—Contracts to value of £500 or over for week ended May 29:—General building work: H. Dorrington & Sons, Spital-ter., Gainsborough, Lincs; Frank Robson, Ltd., 48, Riverdale-rd., Sheffield; A. Richmond & Sons, West-st., Retford, Notts; Unit Construction Co., Ltd., 38, Millbank, S.W.1; M. & F. O. Foster & Co., Ltd., 23, York-rd., Hitchin, Herts. Agricultural maintenance work: J. W. Page, Ltd., Uxbridge-rd., Hampton Hill, Middx; A. T. Brickwood, Burton-on-the-Wolds, nr. Loughborough, Leics.; E. S. Walley & Co., Ltd., 135, Sankey-st., Warrington.

†London (M.O.W.).—Contracts placed by M.O.W. for week ended May 27:—

London: M.N.I., 29, Romford-rd., Stratford, E.15, occupational services, Thos. Bates & Son, Ltd., The Old Brickworks, Harold Wood, Essex. West Kensington P.O.S.B., additional temporary building, Thos. Bates & Son, Ltd., The Old Brickworks, Harold Wood, Essex. 271, High Holborn, cafeteria for Home Office, John Greenwood, Ltd., Arthur-st., E.C.4. *Angus:* Forfar, P.O. garage and workshop, Purvis Industries, Ltd., Cobden-st., Montrose. *Beds.:* Bedford N.A.E., cooling towers, Film Cooling Towers (1926), Ltd., 10, Spencer-rd., Chiswick, W.4. Bedford N.A.E., construction and erection of main compressor plant for the high-speed laboratory and vertical spinning tunnel, British Thomson-Houston, Ltd, Crown House, Aldwych, W.C.2. *Berwickshire:* Earlston Public School, temporary classrooms, kitchen and dining-room, Edinburgh, Building Contractors, Ltd., 32, Castle-st., Edinburgh. *Bucks.:* Westcott R.E., brick houses, services for aluminium houses and alterations to sick quarters, Lavender McMillan, Ltd., 54, Cheam Common-rd., Worcester Park, Surrey. *Ches.:* Alsager Hostel for E.V.W. (H.M.S. "Excalibur") (ex-Naval Establishment), internal decorations, Exors. of Ernest Curzon, West Dudley-st., Winsford, Ches. *Cumberland:* Windscale Works, extension of electrical work in connection with British Electricity Authority's sub-station, John Laing & Sons, Ltd., Mill Hill, London, N.W.7. Keswick, local office for M.N.I., Geo. Wimpey & Co., Ltd., Fenwick-terr., Newcastle-on-Tyne 2. *Derbys.:* Alfreton, extensions to miners' hostel, Ford & Weston, Ltd., Osmaston-rd., Derby. *Devonshire:* Plymouth M/E School programme, pitch mastic flooring, Highways Construction, Ltd., Caxton-st., S.W.1. Devonport, Richmond-walk, construction of quay, J. Garrett & Son, Ltd., Embankment-la., Prince Rock, Plymouth. *Durham:* West Hartlepool, Newburn School, kitchen and dining-room, H. Hewitt, Haswell, Co. Durham. Stockton-on-Tees, St. Cuthbert's School, additional classrooms, Arthur Robinson (Contractors), Ltd., 423, Linthorpe-rd., Middlesbrough, Yorks. *Flintshire:* Rhyl, Sandringham-ave., adaptations to P.O. garage, R.A. Buckle, Ltd., Gas Works-la., Prestatyn. *Glouces.:* Bristol, Bedminster, alterations and adaptations to Polish hostel, John Perkins & Son, Ltd., St. Mark's-rd., Bristol 5. *Hampshire:* Alresford, Perins Senior School, dining accommodation, W. J. Fennell & Co., Ltd., 79, Hyde-st., Winchester. Portsmouth, Woodlands-st. site, temporary school buildings, Faulkners, 113a, London-rd., Waterlooville, Portsmouth. *Herts.:* Cheshunt, Waltham Cross and Cheshunt School, temporary school buildings, McManus & Co., Ltd., 1111, High-rd., Whetstone, N.20. Barnet, Byng-rd. Secondary Modern School, temporary school buildings, T. W. Rodger & Sons, Ltd., 33, Byng-rd., Barnet.

Kent: Ashford, Willesborough Primary School, kitchen and dining-room, Kent & Sussex Contractors, Ltd., 109, Station-rd., Sidcup. Folkestone, Dover-rd., temporary school buildings, O'Marx & Son, Ltd., 15, Sandgate-rd., Folkestone. Canterbury, St. Dunstan's C. of E. School, London-rd., temporary school buildings, Ringmer Building Works, Ltd., Ringmer, nr. Lewes. *Lanarkshire:* Shotts, M.N.I. Offices, Cowiesons, Ltd., 3, Charles-st., St. Rollox, Glasgow, N. *Lancs.:* Oldham, Earle Mill, hostel for E.V.W., heating and engineering services, Norris Warming Co., Market-st., Stretford, Manchester. Preston, Bamber Bridge, E.V.W. Hostel, electrical installations, Speeds (Widnes), Ltd., Regent-rd., Widnes, Lancs. *Lincs.:* Sutton, St. James School, nr. Spalding, temporary school buildings, Allnatt (London), Ltd., Castle Market-st., Fakenham, Norfolk. *Middlx.:* Stanmore T.O.B. Site "B," mastic asphalt flooring, Associated Asphalt Co., Ltd., 18, Queensberry-pl., S.W.7. Hanwell, St. Ann's School, temporary school buildings, Wm. Hamilton & Co., Ltd., 20, Peel-st., W.8. *Midlothian:* West Calder High School, temporary classrooms, Whatlings, Ltd., 10, Woodside-cres., Glasgow. *Notts.:* Eastwood, extensions to miners' hostel, Ford & Weston, Ltd., Osmaston-rd., Derby. Mansfield East, extensions to miners' hostel, Gee Walker & Slater, Ltd., Uttoxeter Old-rd., Derby. Mansfield North, extensions to miners' hostel, Gee Walker & Slater, Ltd., Uttoxeter Old-rd., Derby. Kirkby-in-Ashfield, extensions to miners' hostel, Ford & Weston, Ltd., Osmaston-rd., Derby. *Perthshire:* Bridge of Earn Hospital, improvements to bathrooms, etc., in staff block, Tayside Building Co., William-st., Tayport. *Ross and Cromarty:* Lewis, temporary school buildings at 22 sites, Scottish Tarmacadam & Asphalte Co., Ltd., 44-52, Bilbao-st., Glasgow. *Shropshire:* Worfield C. of E. School, temporary school buildings, John McLean, Ltd., Coven, Wolverhampton. *Staffs.:* Wolverhampton, Red Cross-st. School, dining-room, scullery and central kitchen, M. A. Boswell (Contractors), Ltd., School-st., Wolverhampton. *Stirlingshire:* Stirling, Riverside School, temporary school classrooms, Whatlings, Ltd., 10, Woodside-Crescent, Glasgow. *Wigtownshire:* Creebridge, Newton Stewart, adaptations to E.V.W. Hostel, J. Alexander & Son, Ltd., 9, Henrietta-st., Galston. *Worcs.:* Pershore Racecourse Camp, alterations and adaptations, Wheeler & Mansell, Ltd., Lime-st., Evesham. *Yorks:* Ilkley, Wells House Hostel, Wells-rd., (M/L), adaptations for E.V.W., J. Prior & Son, "Threesix," Guiseley.

†London (War Dept.).—Works contracts placed by War Dept. for week ended May 22:—

Lanarkshire: Building work, Wm. Paris, Junr., Broxburn, W. Lothian. *Wilts.:* Building work, W. E. Chivers & Sons, Ltd., Devizes; George Shears & Sons, Ltd., Bournemouth.

Malden.—32 houses at No. 11 site, South-la., for Malden & Coombe R.C. H. M. Collins, B.E., Municipal Offices, New Malden Surrey. E. C. Harris & Partners, quantity surveyors, 3, Bedford-sq., W.C.1: *C. H. Coates, Ltd., Davis-rd., Surbiton, Surrey.

Manchester.—Factory, Paston-rd., Northenden, Wythenshawe: *Fram Reinforced Concrete Co., Ltd., 165, Plymouth-gr., Chorlton-upon-Medlock, Manchester 13.

Mildenhall.—Six houses at Brandon, for R.D.C.: †R. Hogg & Son, Coney Weston, £3,717.

Mill Hill.—Six buildings at Grenville-pl., for Rawlplug Co., Ltd.: *E. Passmore, Ltd., 1, High-st., Edgware.

Mitcham.—46 houses at Tamworth Lodge estate, for T.C. Riley Schofield, B.E. & S.: †M. Howard (Mitcham), Ltd., 467, London-rd., Mitcham, £74,275.

New Sarum.—52 houses off Queen Alexandra-rd., Bemerton Heath, Salisbury, for T.C. S. R. Little, B.Sc., A.M.I.C.E.: *Gorham (Contractors), Ltd., 4, The Crescent, Goring-rd., Goring-by-Sea, Worthing.

Okehampton.—16 traditional houses and incidental works at O.S.582, North Tawton, for R.D.C. L. G. Bailey, E. & S., 3, Station-rd.: *W. A. Stoneman, North Tawton, Devon, £20,612.

Penarth.—Reconstruction of Penarth Pier, for U.D.C. Wallace Evans & Partners, cons. engineers, 13, Victoria-st., Penarth: *George M. Carter (Erectors), Ltd., 7, Victoria-st., S.W.1.

Raynes Park.—Complete reinstatement of war damage and internal and external redecorations at Whatley-ave., Raynes Park Secondary and Primary School, for Surrey C.C. Architect, J. Harrison (A.), County A. Quantity surveyors, A. E. Thorton-Firkin & Partners: *Baileys, Builders and Contractors, Ltd., New Malden.

Rochford.—Eight pairs of houses at Hawkwell and four pairs at Barling, for R.D.C. D. C. Denton-Smith, architect, 40, Regent-st., Cambridge: †G. Spooner & Sons, Westcliff-on-Sea, Essex.

Salford.—144 houses at Fairhope estate, Eccles

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Old-rd., Pendleton, for T.C.: *Lanes Construction Co., Ltd., Swinton, £153,932.

Scottish Special Housing Association, Ltd.—Contracts placed from April 11 to May 10: (a) Site Servicing—Bilston, Midlothian (76 traditional), City of Edinburgh Water Dept., Edinburgh, water mains; D. Blake & Co., Edinburgh, water services; Poltonhall, Lasswade, Midlothian (600), Caledonian Group of Gas Companies, gas services; Sighthill, Edinburgh, City E., Edinburgh, site servicing. (b) House Erection—11, Drumsheugh-gdns., Edinburgh, The Brightside Foundry & Engineering Co., Ltd., Edinburgh, heating apparatus; D. & J. Borthwick, Edinburgh, plaster work, alterations; Easthouses, Newtongrange (66 traditional), Park & Thomson, Lasswade, floor finish, screeding; Bank-st., Blackhall Forest, nr. Banchory (six foresters', one head forester's, traditional), Purvis Industries, Ltd., Montrose, all trades; Race-rd., Bathgate (36 traditional), Bathgate Co-operative Society, Ltd., Bathgate, painter; Falside, Bathgate (76 traditional), Bathgate Co-operative Society, Ltd., Bathgate, painter; Shortlees, Kilmarnock (34 traditional), The Val de Travers Asphalte Paving Co., Glasgow, floor finish; Gateside-rd., Galston (40 traditional), The Val de Travers Asphalte Paving Co., Glasgow, floor finish; Bruxie Lodge (two foresters', one head forester's traditional), John M. Gall, Gowan Bank, Maud, slater and roughcast; Rosshall, Glasgow (194 Weir Quality), S.W. Scotland Electricity Board (Clyde Valley District), Glasgow, electrical supply; Toryglen, Glasgow (196 Weir Quality), S.W. Scotland Electricity Board (Clyde Valley District), Glasgow, electrical supply; Belismyre, Dumbarton (310), S.W. Scotland Electricity Board (Clyde Valley District), Glasgow, electrical supply; Watling-st., Motherwell (42 B.I.S.F.), Gas Dept., Motherwell, gas piping; (Managers' houses—traditional). Hamilton (6), Elderslie (18), Kilmacolm (4), Airdrie (10), Coatbridge (6), Kilmarnock (9), Bishopbriggs (2), Robert Aitken & Sons, 20-30, South Bridge-st., Airdrie, fencing.

Seaford.—12 bungalows at Chyngton-av., for U.D.C.: *Ringmer Bldg. Works, Ltd., The Broyle, Ringmer, Sussex, £13,252.

Skegness.—50 houses at Church-la., for U.D.C. R. H. Jenkins, architect: *Skegness U.D.C., Town Hall, £70,637.

Swansea.—Eight houses at Tygroes Fach Saron, for T.C.: *Davies Bros., Swansea, £10,069.

Tamworth.—16 houses at Glascote site, for R.D.C. H. N. Jepson (A.), Midland Bank-chbrs., Nuneaton: *F. Hales & Co., Castle Bromwich, Birmingham, £18,077 (subject to M.H. approval).

Tynemouth.—Motor works at West Chirton Trading Estate, for C.W.S., Ltd. Plans by C.W.S. architects' dept., 90, Westmorland-rd., Newcastle-on-Tyne: *C.W.S. Bldg. Dept., West Blandford-st., Newcastle-on-Tyne.

Tynemouth.—Flats in Glanton-rd., North Shields: *A. Parsley, Glanton-rd., North Shields.

Warrington.—14 houses at Dallam Farm Housing estate, for T.C. J. Y. Hughes, M.Inst.C.E., B.E., Municipal-bldgs., Bank-park: *C. Cornall, P.O., Daresbury, nr. Warrington, £16,128.

Wellington (Salop).—Eight permanent houses at Great Bolas, for R.D.C. J. Brian Cooper (F.), Corporation-st., Birmingham 4: †Charles R. Coxhill, Ltd., Lilleshall, £15,863.

Whitby.—10 "Airey" houses at Abbeville-av., for U.D.C.: *R. A. Wilson & Sons, Spring-hill, Whitby.

Whitley Bay.—Houses for Whitley and Monkseaton U.C.: *R. S. Gofton & Son (8); *R. Cruickshank (6); *Rockcliffe Building Co. (10); *J. Douglas (8); *J. Jewels (12).

Wood Green.—12 flats at Pellatt-gr., for T.C.: *A. E. Lewis & Son, Ltd., £16,262.

Worthing.—34 houses at A'Beckett-gdns., and 66 at Field-pl. estate, for T.C.: *Wates, Ltd., 1258-1260, London-rd., Norbury, S.W.16, £126,167.

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